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EATING DISORDERS: THE IMPACT ON CHILDREN AND FAMILIES

HEARING

BEFORE THE

SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES HOUSE OF REPRESENTATIVES

ONE HUNDREDTH CONGRESS

FIRST SESSION

HEARING HELD IN SAN FRANCISCO, CA, JULY 31, 1987

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EATING DISORDERS: THE IMPACT ON CHILDREN AND FAMILIES

FRIDAY, JULY 31, 1987

House of Representatives,
Select Committee on Children, Youth, and Families,
San Francisco, CA.

The committee met, pursuant to notice, at 9:40 a.m., Marshal Hale Memorial Hospital, 3773 Sacramento Street, San Francisco, CA, Hon. George Miller, chairman, presiding.

Members present: Representatives Miller, Boxer, and Coats.

Staff present: Ann Rosewater, staff director; Jill Kagan, professional staff; Lisa Naftaly, research assistant; Mark Souder, minority staff director.

Chairman **Miller**. The House Select Committee on Children, Youth, and Families will come to order.

The Select Committee has come to San Francisco today to gather information and to raise public awareness about a growing problem among millions of our nation's youth, a pre-occupation with weight and body image that often leads to severe and even deadly eating disorders, including anorexia nervosa and bulimia.

In the last several months, the Select Committee has explored major public health issues affecting the family—AIDS, child abuse, mental health implications, increasing racial tensions among students and the 7.5 million emotionally troubled children usually hidden from public view.

Today's hearing on eating disorders will highlight another rarely revealed childhood health and mental health problem, often related to depression. Serious eating disorders, such as anorexia nervosa and bulimia, may affect as many as one teenage girl in eight and, contrary to common perception, boys are affected as well. A national survey found that four percent of adolescent boys also report serious symptoms of anorexia and bulimia.

Witnesses today will also challenge the myth that lower income teenagers are exempt from this illness. Many families under stress, brought about by changing demographics and declining living standards, struggle to adjust to work, school and social systems that have been slow to meet their changing needs.

It comes as no surprise that children and adolescents are increasingly affected by family economic and social pressures, driven to succeed academically and socially. For many, weight, food, thinness and a compulsion to exercise become obsessions, spurred by an over-zealous media and advertising promotion of stereotypes.

In 1985, the national Gallup poll revealed that three teenage girls in five are sufficiently concerned about their weight to diet. More than one-third of teenage boys and one-third of teenage girls say they have gone on food binges in which they eat extremely large quantities of high-calorie foods in a short period of time. More than half of these teen-agers then pursue extreme measures, such as vigorous exercise, fasting, vomiting, or using purgatives. It is also relevant to note that obesity has increased by more than fifty percent among children in the last fifteen years.

While there may be no single cause of eating disorders among teenagers or even younger children, our witnesses today will provide mounting evidence that a high percentage of those with eating disorders were victims of physical or sexual abuse as young children. Whatever the risk factors or causes, cultural, psychological or biological, one fact is clear: the effects of eating disorders on families, friends, and the community can be devastating, especially when accompanied by substance abuse, depression and even suicide. Not least of these effects is the stigma which, unfortunately, has been sufficient to deter many families from seeking treatment. Even families who do come forward may find little support or encouragement.

We have much to learn about these issues. The social stigma associated with eating disorders has also kept many of us in the dark about the facts.

I would like to especially thank my colleague, Congresswoman Barbara Boxer, for bringing the Select Committee to San Francisco to enhance the public recognition of the severe consequences of eating disorders and the need for early intervention and family involvement, and ultimately the role of prevention. And I want to express my appreciation to my other colleague, Congressman Dan Coats, who has traveled out here and taken his time away from his district in Indiana. Congressman Coats is the ranking minority member on this committee. Finally, our appreciation to Marshal Hale Memorial Hospital and to Robert Duncan, the President, for helping us to make all of these arrangements.

At this time, I would like to recognize Congressman Coats for any statement he may have.

[Prepared statement of Chairman George Miller follows:]

Opening Statement of Hon. George Miller, a Representative in Congress From the State of California and Chairman, Select Committee on Children, Youth, and Families

The Select Committee has come to San Francisco today to gather information and to raise public awareness about a growing problem among millions of our nation's youth—a preoccupation with weight and body image that often leads to severe, and even deadly, eating disorders, including anorexia nervosa and bulimia.

In the last several months, the Select Committee has explored major public health issues affecting families—AIDS, child abuse, the mental health implications of increasing racial tensions among students, and the 7.5 million emotionally troubled children usually hidden from public view. Today's hearing on eating disorders will highlight another rarely revealed childhood health and mental health problem, often related to depression.

Serious eating disorders such as anorexia nervosa and bulimia may afflict as many as one teenage girl in eight. And contrary to common perception, boys are affected as well: a national survey found that 4 percent of adolescent boys also report serious symptoms of anorexia and bulimia. Witnesses today will also challenge the myth that lower income teenagers are exempt from these illnesses.

Many families under stress, brought about by changing demographics and declining living standards, struggle to adjust to work, school, and social systems that have been slow to meet their changing needs. It comes as no surprise then that children and adolescents are increasingly affected by family economic and social pressures, driven to succeed academically and socially. For many, weight, food, thinness, and a compulsion to exercise become obsessions, spurred on by overzealous media and advertising promotion of stereotypes.

In 1985, a national Gallup poll revealed that three teenage girls in five are sufficiently concerned about their weight to diet. More than one-third of teenage boys and one-third of teenage girls say they have gone on food binges in which they ate extremely large quantities of high-calorie foods in a short period of time. More than half of these teenagers then pursue extreme measures such as vigorous exercise, fasting, vomiting or using purgatives. And it is also relevant to note that obesity has also increased by more than 50% among children in the last 15 years.

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"EATING DISORDERS: THE IMPACT ON CHILDREN AND FAMILIES," A FACT SHEET

Anorexia nervosa—a syndrome of extreme weight loss, body-image disturbance and an intense fear of becoming obese—typically begins in early to late adolescence, although it can start any time from prepuberty to the early 30's. Bulimia—a syndrome of binge-eating episodes followed by self-induced vomiting, fasting, or the use of diuretics or laxatives, typically begins between the ages of 17 and 25.

MILLIONS OF ADOLESCENTS, YOUNG ADULTS AFFLICTED BY EATING DISORDERS

An estimated 1 in 200 teenagers ages 12-18 are anorexic; 90% of those affected are female. (National Institute of Mental Health [NIMH], 1987)

Anorexia and bulimia together affect as many as 10-15% of adolescent girls and young women; estimates of the prevalence of bulimia among college women range as high as 19%. (Health and Public Policy Committee, American College of Physicians, [HPPC-ACP], 1986)

In a recent national poll, about 2 million women ages 19-39 and 1 million (12%) teenage girls reported some symptoms of bulimia or anorexia. Four percent of teenage boys claimed to have had symptoms of either bulimia or anorexia. (Gallup, November 1985)

In a 1985 survey of 1,728 10th graders, 13% reported purging behavior. Female purgers outnumbered males 2 to 1. (Killen, Taylor, Telch, Saylor, Maron, & Robinson, 1986)

A survey of 907 college freshmen and seniors found that 8% of the women and 0.7% of the men were clinically bulimic. 23% of the women and 14% of the men reported eating binges at least once a week on average. (Zuckerman, Colby, Ware & Laxerson, 1986)

Ballet dancers ages 12-21 report characteristics of anorexia nervosa significantly more often than controls and frequently use weight reduction strategies, such as fasting, binging, and selective food restriction. 50% of dancers, as compared to 20% of controls, weighed 80% or less of expected weight. (Braisted, Mellin, Gong, & Irwin, Jr., 1985)

ANOREXIA INCREASING; DEATH RATE HIGH

The incidence of anorexia nervosa has nearly doubled over the past two decades, increasing from 0.35 per 100,000 between 1960 and 1965 to 0.64 per 100,000 between 1970 and 1976. (Herzog & Copeland, in HPPC-ACP, 1986)

The rise in anorexia between 1970–1976 was seen most dramatically in adolescent and young-adult females from the upper social classes; rates of illness in males declined slightly during this period, while the rate in middle-class females remained constant. (Strober, in Brownell and Foreyt, eds., 1986)

Follow-up studies indicate mortality rates for anorexia nervosa patients of between 15–21%. In 1983, 101 deaths from anorexia were reported. (Diagnostic and Statistical Manual of Mental Disorders, 3rd edition [DSM-III]; FDA Consumer, May 1986)

IDEAL OF THINNESS TAUGHT EARLY; DIETING, INAPPROPRIATE WEIGHT CONTROL MEASURES COMMON

When preschoolers ages 2–5 were presented with 2 life-size dolls, identical in all respects except corpulence, 91% of the children who expressed a preference indicated that they preferred the thin doll over the heavy doll. In the same study, fat girls and thin boys were seen as antisocial; thin children were seen as more competent than fat children; and thinner children tended to be liked more than children of average weight or heavier. (Dyrenforth, Wooley, and Wooley, in Kaplan, 1980)

A survey of 494 San Francisco female children and adolescents, mostly from middle income families, found that while only 15% were actually overweight, more than 50% (31% of the 9-year-olds) thought they were too fat. Almost ½ of the 9-year-olds and 80% of the 10-year-olds were dieters. (Mellin, 1987)

Fifty-nine percent of teenage girls would like to lose weight, while 33% are satisfied with their weight and 8% would like to gain. In contrast, 52% of boys would like their weight to stay the same, 28% would like to gain, and 20% would like to lose weight. Sixty-five percent of the girls say they would be more pleased with their appearance if they were thinner; only 39% of boys feel the same way. (Gallup, November 1985)

More than 40% of teenage boys and 34% of teenage girls report having gone on food binges; more than ½ of these teenagers pursue extreme measures such as vigorous exercise, fasting, vomiting, or using purgatives, to compensate for food binges. (Gallup, November 1985)

Of 907 college freshmen and seniors, 50% of the women and 13% of the men said they were "overweight" even though only 10% of the women and 11% of the men actually were overweight. Nearly ¼ of the women and almost 10% of the men reported using one or more inappropriate methods of weight control, including fasting, diuretics, laxatives or self-induced vomiting. (Zuckerman et al., 1986)

EATING DISORDERS POSSIBLY LINKED TO DEPRESSION, SUBSTANCE ABUSE, TROUBLED FAMILIES

While no single causal theory has been confirmed, the contributions of personality, family, culture and biology to the development of eating disorders continue to be explored. Among the findings are:

Mood disorders, such as depression, and eating disorders are thought to be related but the nature of the relationship is unclear. Some maintain that the mood disturbance is secondary to the eating disorder; others claim that eating disorders may be variant expressions of an underlying depression; while others suggest that eating disorders are a product of the interplay of biological, psychological, familial and sociocultural forces. (Swift, Andrews, & Barklage, 1986)

Immediate family and close relatives of anorexic patients were substantially more likely to have mood disorders than would be expected in the general population. (Strober, in Brownell & Foreyt, eds., 1986)

One study found that eating disorders occurred in 6.4% of immediate relatives of anorexia nervosa patients, as compared to 1.3% of control relatives; another study reported a history of probable anorexia nervosa in immediate relatives in 29% of 102 consecutive cases. (Strober, in Brownell & Foreyt, eds., 1986)

Of 275 bulimics attending an eating disorders clinic, 34% reported a history of alcohol and drug problems (Mitchell, Hatsukami, Eckert & Pyle, 1985 as cited in Killen, et al., 1987)

A study of nearly 200 women found that bulimics perceived their families as being significantly less supportive and helpful than did normal controls and that their families did not encourage assertive, self-sufficient behavior. Despite a perception of tremendous familial conflict and anger, bulimics reported that open, direct expression of feelings was discouraged. (Johnson & Flach, 1985)

In a study of parent-child relationships in 80 young women (bulimic, bulimic-anorexic, anorexic and normal controls), both bulimics and anorexics viewed their parents as more blaming, rejecting and neglectful toward them than did controls and they treated themselves with the same hostility and deprivation. Bulimics, but not anorexics, reported severe deficits in parental nurturance and empathy, relative to controls. (Humphrey, 1986)

LIMITED FEDERAL SUPPORT FOR EATING DISORDERS

In FY 1986, NIMH funded 31 research grants related to eating disorders and appetite regulation (anorexia, bulimia, and obesity) totaling approximately $3 million. (NIMH, July 1987)

Mr. COATS. I have no formal statement, Mr. Chairman. Just to thank you and Congresswoman Boxer for convening the hearing on a subject I do not think very many people paid much attention to until the last few years, when it suddenly became known that there was a kind of mysterious health disorder affecting particularly many of our young adolescent girls and, as we have gotten into this, even expanded beyond that population.

I think it is something that is important that we understand and do what we can to further that understanding and means of preventing that from happening among our young people.

So, I look forward to hearing from the witnesses and to hearing their research and their analysis as to where we ought to go with this and what the appropriate role that we should take is. Again, thank you Congresswoman Boxer for arranging some beautiful weather. We are pleased to be in your city and in your district, and to be in part of the Chairman's area that he serves. I look forward to the hearing.

MINORITY FACT SHEET

ANOREXIA

A. Definition

The Diagnostic and Statistical Manual of Mental Disorders III issued by the American Psychiatric Association defines anorexia as a psychophysiologic condition, usually seen in girls and young women, characterized by severe and prolonged inability or refusal to eat, sometimes accompanied by spontaneous or induced vomiting, extreme emaciation, amenorrhea (loss or irregularity of menstrual functions), and other biological changes. Anorexic individuals seek control of their lives by manipulating personal food intake and are generally pleased with the attention generated by their subsequent excessive weight loss. There is an intense fear of becoming obese, distortion of the body image, significant weight loss, and refusal to maintain minimal body weight. Individuals with this disorder say they "feel fat" when they are of normal weight or even emaciated. They are preoccupied with their body size and often gaze at themselves in the mirror.

At least 25% of their original body weight is lost, and there is no other physical illness that would account for the weight loss. The weight loss is usually accomplished by a reduction in total food intake with patients subsisting on fewer than 600 calories per day and restricting their food intake primarily to protein. Anorexics most times couple fasting with self-induced vomiting, use of laxatives or diuretics, and/or extensive exercise to decrease their weight even further.

Other physical complications due to anorexia include slowing of the heartbeat, loss of normal blood pressure, cardiac arrest, dehydration, skin abnormalities, hypothermia, lethargy, potassium deficiency, kidney malfunction, constipation, and the growing of fine silky hair on the body termed "laguno", the body's effort at conserving heat.

B. Who Gets it

Age at the onset is usually early to late adolescence, and occurs predominantly in females (95%). As many as 1 in 250 females between 12 and 18 years may develop the disorder. The disorder is more common among sisters and mothers of individuals who have the disorder than in the general population. (DSM-III, 1980.)

About 5% to 10% of anorexics are male. Most males who exhibit the symptoms are athletes trying to lose weight, according to Dr. David Greenfeld, assistant professor of psychiatry at Yale. ("Eating Disorders: The Price of Desire to be Thin," *Medical World News*, July 9, 1984.)

People of all races can develop bulimia and anorexia, but the vast majority of patients are white, which may reflect socio-economic rather than racial factors. (Farley, "Eating Disorders: When Thinness Becomes an Obsession," *FDA Consumers*, May 1986.)

C. Causes

There is no one cause for both anorexia and bulimia, however, doctors and researchers assert that a combination of factors may contribute to the development of these illnesses.

Social Factor.—Society emphasizes and values being fit and slim. Many positive personality attributes are associated with thinness; if one is thin, one is perceived automatically to be successful, in control, and sexy. Society tends to accord a wide range of preferential treatments to the model-like person. However, society is also obsessed with food and diets. There is an overabundance of high-calorie foods, yet there seems to be a new diet book coming out every month. Women's magazines offer both delicious recipes and advice on dieting. Thus, women receive ambiguous messages about food and their body.

Dr. Hilde Bruch states in her book *The Golden Cage*, "One might speak of an epidemic illness, only there is no contageous agent; the spread must be attributed to psychosociological factors . . . I am inclined to relate it to the enormous emphasis that fashion places on slimness." ('Eating Disorders: The Price of Desire to be Thin," *Medical World News*, July 9, 1984.)

"Many females feel excessive pressure to be as thin as some "ideal" perceived in magazines and on television. Evidence suggests that the pressure is increasing. For example, a study of *Playboy* centerfolds and Miss America contest winners from 1959 to 1978 showed to progressive decrease in the women's weight and bust and hip measurements. (Farley, "Eating Disorders: When Thinness Becomes an Obsession," *FDA Consumer*, May 1986.)

Psychobiologic Regression Factor.—Researchers holding this theory suggest that the patient is unwilling to accept her role as a woman and her feminine sexuality, and fears sexual intimacy. She uses the disorder to resist the idea of sexual maturity. Once the body weight drops below a critical level because of inadequate nutrition, developmental changes of puberty are reversed. Anorexia produces psychobiological regression to an earlier, prepubertal stage of development and may be an expression of an inability to cope with the stresses and demands of adolesence. This regression is most obvious with the loss of menstruation, breast development, and sexual interest.

"Anorexia and bulimia may be triggered by an inability to cope with a situation in life: puberty, the first sexual contact . . . or separation from family because of college." (Farley, "Eating Disorders: When Thinness Becomes an Obsession," *FDA Consumer*, May 1986.)

Family Factor.—Conflicts which exist within the anorexic's family may contribute to anorexia. Such a family does not discuss its problems and thus is unable to define and resolve them. These families seem perfect at first glance, however many are overprotective, rigid, poor problem-solvers, and tend to avoid conflict. While family members appear to be close, they are too concerned and too involved with each other. This phenomenon of "enmeshment" interferes with identity formation.

"Family studies suggest that the patient may merely be the member identified as troubled in a generally disturbed family. Features common to such dysfunctional families include enmeshment, overprotection, rigidity, lack of conflict resolution, use of the child to diffuse parental conflict, and overemphasis on high achievement." (Herzog and Copeland, "Eating Disorders," *New England Journal of Medicine*, August 1, 1985.)

"Often a patient becomes symptomatic when a loss or change occurs in the family situation." ("Eating Disorders: The Price of Desire to be Thin," *Medical World News*, July 9, 1984.)

"Despite weight gain and resumption of menses in most cases, social maladjustment in family relationships and pathologic eating behaviors persist in more than half the patients." (Herzog and Copeland, "Eating Disorders," *New England Journal of Medicine,* August 1, 1985.)

Biological Factor.—Disturbance of the hypothalamus, the master control for all glandular secretion, has been suggested as a possible cause. However, it is not clear whether starvation interferes with hypothalamic function or whether hypothalamic disturbances trigger anorexic behavior. Another possible biological link is the tendency for anorexics and bulimics to be victims of depression.

"A certain biological factor that is linked to clinical depression may contribute to the development of anorexia and bulimia. A biological change in some people can predispose them to depression. 7 of 10 anorectics and bulimics are depression-prone, as are many of their relatives. (Farley, "Eating Disorders: When Thinness Becomes an Obsession," *FDA Consumer,* May 1986.)

"Depressive symptoms are commonly seen in anorexia nervosa and bulimia. In one study, 50 percent of anorectic patients and more than 20 percent of bulimic patients met criteria for major depressive disorder." (Herzog and Copeland, "Eating Disorders," *New England Journal of Medicine,* August 1, 1985.)

D. Treatment

There is no agreement on the best way to treat anorexia. Some experts favor psychological intervention while others place more emphasis on physical intervention. Most treatment programs have elements of each since most anorexics deny there is a problem and refuse and even sabotage attempts at treatment. Usually, patients are treated for their physical symptoms first. After the initial treatment phase the patient receives psychotherapy to determine and treat the underlying cause for the disorder. Most clinicians include the patient's family at this latter stage of treatment. The following are some of the frequently recommended aspects of treatment.

Hospitalization, including intraveneous feeding.—In severe cases where extreme weight loss and emaciation, prolonged depression, suicidal tendencies, alcohol and/or drug abuse, or serious physical side effects is the case, some period of hospitalization may be necessary. Restoration of normal body weight and the consumption of a balanced diet at regular mealtimes without supervision is the goal.

Psychotherapy.—Cognitive therapy concentrates on eliminating the adolescent's incorrect attitudes and beliefs about foods, health, body image, and self-concept.

Family Therapy.—Family therapy is indicated if the adolescent is less than 16 years old or if she lives with her parents. the adolescent's behavior is often a response unmet dependency and security needs of the family which interferes with her own movement toward independence and autonomy. The aim of family therapy is to educate the family and change the way the family members interact with one another.

Behavior Modification.—This often involves the establishment of behavioral consequences, often contractually defined, pairing certain desirable behaviors on the adolescent's part and specific reinforcements. In the case of an obstinate adolescent, it may become necessary to introduce more negative reinforcements.

Drug Therapy.—Over the last twenty years researchers have tested a number of drugs in order to treat anorexia, although studies have not been clinically controlled and results are speculative. Anorexics respond to antidepressants with minor weight changes and slight overall improvement. Appetite stimulants and opioid blocks (drugs that manipulate appetite) also have limited effects. (Muuss, "Adolescent Eating Disorder: Anorexia Nervosa," *Adolescence,* Fall 1985.)

E. Cost of Treatment

Treatment costs for both anorexia and bulimia could run into the thousands of dollars depending on the location, length and type of treatment sought. In 1982 some patients reported spending up to $6,000 a month for medical and psychiatric treatment while hospitilization, on the average, lasted 3½ months and cost $35,000. For one patient medical expenses totalled over $260,000. At one center where the goal is to have patients eat normally, the average cost for treatment is $370 a day and a three-month stay could total as much as $33,000. (CRS Issue Brief, "Eating Disorders: Anorexia Nervosa and Bulimia," 1987.)

Costs reflect regional differences and also depend on client needs, professional care staff and in-patient/out-patient care. For example, at Marshal Hale Hospital in San Francisco, patients may participate in either out-patient or in-patient group therapy, where a nutritionist, internist, psychologist and nurse are on staff. Out-patient care costs $33 for each session; twelve 90-minute sessions are taken over a twelve-week period. In addition patients may enroll into a support group that meets weekly with no charge to the participants. In-patient care can run from $425/day to

$15,000/month. (CRS Issue Brie, "Eating Disorders: Anorexia Nervosa and Bulimia," 1987.)

Note: A number of potential witnesses described the number one problem as being the high cost of treatment and the lack of adequate insurance coverage. Many insurance companies treat these illnesses as purely mental illnesses and do not take into account the physical effects of the diseases. This may be the major issue of the hearing.

BULIMIA

A. Definition

The essential features of bulimia according to the Diagnostic and Statistical Manual of Mental Disorders III include episodic binge eating accompanied by an awareness that the eating pattern is abnormal, fear of not being able to stop eating voluntarily, and depressed mood and self-deprecating thoughts following the eating binges. Binges usually occur in secret and consist of high-caloric, easily ingested food such as ice cream. A binge is usually terminated by abdominal pain, sleep, social interruption, or induced vomiting. Vomiting decreases the physical pain caused by the binge, allowing either continued eating or termination of the binge, and often reduces post-binge anguish. The bulimic makes repeated attempts to lose weight by severely restrictive diets, self-induced vomiting, and/or use of cathartics or diuretics. The bulimic experiences frequent weight fluctuations greater then ten pounds due to alternating binges and fasts.

Bulimia's binge-purge cycle can be devastating to health in a number of ways. It can upset the body's balance of electrolytes—such as sodium, magnesium, potassium and calcium—which can cause fatigue, seizures, muscle cramps, irregular heartbeat, and decreased bone density, which can lead to osteoporosis. Repeated vomiting can damage the esophagus and stomach, cause the salivary glands to swell, make the gums recede, and erode tooth enamel. Skin changes, which can be seen on the back of the hand, also are sign of the illness. These changes are due to using the hand to mechanically stimulate the gag reflex. Menstrual functioning is often irregular in patients with bulimia, although the profound amenorrhea seen in anorexia nervosa is rare because there is no severe weight loss. Bulimic patients' body weight may fluctuate 10% to 15% above or below the ideal level, but it never declines the 25% that would meet the criteria for anorexia nervosa.

B. Who Gets It

Bulimia usually begins between ages 17 and 25. It is most often diagnosed in high school and college females who are generally extroverted, impulsive, and sexually experienced. Bulimics often have a history of other impulsive behaviors, such as alcohol or drug abuse. As in the case of anorexia, this illness affects primarily women, although bulimia tends to affect late adolescent women and women in their early twenties rather than early adolescence. However, there is some overlap between the two diseases.

C. Causes

"It is our belief that while anorexia nervosa represents severe problems surrounding the passage *into* adolescence, bulimia reflects problems in passage *out of adolescence* and into independent adulthood." (Wooley, S., Kearney-Cooke, A., "Intensive Treatment of Bulimia and Body-Image Disturbance," *Handbook of Eating Disorders*, 1986.)

Bulimia has many of the same causes as anorexia, namely biological conditions causing depression, changes in the family situation such as going off to college, and family dysfunction. However, two factors seem to be most responsible for the development of bulimia: cultural emphasis on thinness and the changing role of women.

Social Factor.—As stated earlier, there exists a cultural bias towards thin women and an increasing preference for a lean body type in women. This is partly due to the fact that these girls and women are daughters of the Weight Watchers generation—the first generation to be raised by highly weight-conscious mothers. Women often learn from their mothers to start dieting early. Dieting is, in fact, almost a prerequisite for developing bulimia. Most people regain the weight they lose on a diet. The body eventually adjusts to a low-calorie intake by slowing its metabolic rate, making it easier to gain weight. So the more times a woman diets, the more desperate she's likely to become—and the more likely to resort to binges and purges. (Wooley, S. and Wooley, W., "Thinness Mania," *American Health*, October 1986.)

Changing Women's Roles.—Women's roles have changed considerably in the last decade due to the women's movement. Women are not only homemakers but are now top executives. They not only fulfill the more traditional female roles, but have now moved into traditionally male areas and roles. With this comes much pressure and many psychological considerations when related to eating disorders, specifically bulimia.

"To aspire to be a mother and homemaker is no longer enough. They must succeed on male terms, landing important jobs and becoming self-reliant. For these women, the passage from adolescence to adulthood has involved problems unknown to earlier generations. Many of them rage inside at their mothers for not offering an example they can follow." (Wooley, Susan, "Thinness Mania," *American Health*, October 1986.)

"For a bulimic, to have womanly curves is to be like her mother—powerless." (Wooley, Susan, "Thinness Mania," *American Health*, October 1986.)

"The new script for adulthood calls on a woman to break her ties with her mother, and identify with her father . . . To become like their fathers, our patients feel compelled to be thin—not just to minimize their womanliness, but also because thinness, in this culture, is a sign of achievement and mastery. The bulimic woman's body proclaims that she is as strong and lean as a man." (Wooley, Susan, "Thinness Mania," *American Health*, October 1986.)

D. Treatment

Bulimia is treated in much the same way as anorexia, however there is usually less emphasis on family therapy because patients tend to be older and in many cases living away from home.

Treatment usually starts with a physical examination to ensure that the patient is stable medically. Hospitalization should be considered, although the majority of patients can be safely treated on an outpatient basis. Special attention should be given to cases of laxative abuse. Such patients usually retain considerable amounts of fluid when the laxatives are withdrawn, and also experience fairly profound reflex constipation. Thus, they require a great deal of supervision during withdrawal. (Dr. James Mitchell's research paper entitled "Bulimia," University of Minnesota, 1987.)

A variety of treatment approaches are used including individual psychotherapy, group psychotherapy, and medication, treatment, usually antidepressant medication.

There have been few comparison studies, and long-term outcome and relapse rates have not been reported for most approaches. However, it has been concluded that although anti-depressant drugs are associated with improvement in many patients, they do not "cure" bulimia and most patients do not become abstinent from the behavior. Thus, if the behaviors persist, even at a low frequency, individuals may be a risk for a relapse at a later time.

"Posttreatment recidivism is high among anorexic and bulimic patients. Major outcome studies show that 35% of anorexic patients are eating normally and are immune to neurotic fixations on body image at a mean follow-up period of five years. Though some follow-up studies of bulimic patients indicate that 50%-60% are binge-free after one year, the NIMH's Dr. Gwirtsman believes 'these figures are too good. We don't find this in our studies.'" ("Eating Disorders: the Price of Desire to be Thin," *Medical World News*, July 9, 1984.)

"The combined cure rate for anorexia nervosa and bulimia is 30% . . . a lot of childhood cancers have better cure rates than anorexia nervosa." ("Eating Disorders: The Price of Desire to be Thin," *Medical World News*, July 9, 1984.)

RESEARCH AND FUNDING FOR ANOREXIA AND BULIMIA

Current research activities focus on the use of drugs in treating the two eating disorders, and epidemiologic aspects, especially among college students. In 1984, the National Institute of Mental Health issued a total of $620,545 for anorexia nervosa and bulimia research. By 1986 research funding had doubled to almost $1.5 million. Research is conducted by clinicians and researchers at major medical centers, and public and private clinics, some of which have been established especially for eating disorders. (CRS Issue Brief, "Eating Disorders: Anorexia Nervosa and Bulimia," 1987.)

OBESITY

A. Definition

Generally, obesity is defined as any excess weight 20 percent or more above an "ideal" or desirable" weight (*The Washington Post,* "Obesity is 'Killer Disease' Affecting 34 Million Americans, NIH Reports," February 14, 1985).

According to *Consumers' Research*, obesity is referred to as "an excess of body fat frequently resulting in a significant impairment of health" ("Latest Findings on Obesity and Health," April 1985).

While medically obesity is considered a disease, it is often used in general terms to simply mean "overweight." Most obesity experts have broken obesity down into three definable categories:

Mildly obese.—an individual up to 20% above their ideal weight

Moderately obese.—an individual between 20% and 40% above their ideal weight

Morbidly obese.—considered severely obese and are 100 pounds or 100% above their ideal weights (*Smithsonian,* "Weight Reduction May Start In Our Cells, Not Psyches," June 1986).

According to Dr. Albert Stunkard, "obesity is not a condition for which a precise definition is particularly useful" (*The American Journal of Psychiatry,* "Psychological and Social Aspects of the Surgical Treatment of Obesity," April 1986).

Many specialists who treat obesity don't stress the importance of defining obesity, but instead focus on the need to treat our obese population individually, recognizing that each obese case is different and requires individualized care.

In understanding what obesity is, it is important to recognize that several factors are likely to be involved in the development of obesity. These include genetic and environmental effects, excess caloric intake, and decreased physical activity as well as metabolic and endocrine abnormalities. Because this diversity of factors does exist, this explains why a number of types of obesity are evident (*Consumers' Research,* "Latest Findings on Obesity and Health," April 1985).

B. Key Statistics

In 1985, the National Institutes of Health panel on obesity reported that an estimated 34 million Americans are obese (*The Washington Post,* "Obesity is 'Killer Disease" Affecting 34 Million Americans, NIH Reports," February 14, 1985).

With 34 million obese Americans this means that about 1 out of 5 people over age 19 are obese (*Time,* "Gauging the Fat of the Land," February 25, 1985).

"Statistics indicate that 95 percent of morbidly obese people who lose weight gain it back and that the overall failure rate for all obese people is 66 percent" (*Chicago Tribune,* "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

According to The American Journal of Diseases of children from 1963 to 1980 there was a 54 percent increase in obesity among children 6 to 11 years old and a 39 percent increase among adolescents 12 to 17 years old (*The New York Times,* "Study Finds Epidemic of Childhood Obesity," May 1, 1987).

"People who are 15 to 25 percent overweight have a 34 percent increase in their risk of dying compared with average-weight people." For those with morbid obesity (100 pounds or more overweight), the risk of early death is doubled (*Chicago Tribune,* "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

C. Physical Effects

Recently, discussion has grown as to whether or not mild to moderate obesity actually increases poor health risks. While it has long been accepted that any type of obesity poses considerable health risks, it appears that this assumption is now being challenged and that new evidence suggests that certain levels of obesity may not be quite as hazardous as previously thought.

"Obesity, when measured by relative weight, has an adverse effect on longevity. The greater the degree of obesity in a population the higher the mortality ratio" (*Consumers' Research,* "Latest Findings on Obesity and Health," April 1985).

"Recent data from the National Institute on Aging suggest that the current standards for ideal weight are probably set too low for both sexes and that longevity is increased by somewhat higher body weights" (Wooley, Susan C. and Wooley, Orland W. University of Cincinnati, "Eating Disorders: Obesity and Anorexia,").

However, while new evidence seems to be developing to show that slight to moderate obesity is unharmful, overwhelming personal beliefs and past reports strongly state that obesity is a definite and substantial health problem.

"Studies have shown that obese people have three times the normal incidence of high blood pressure and diabetes, and increased risk of heart disease, a shorter life-span, and an unusually high risk of developing respiratory disorders, arthritis and certain types of cancer" (*Time* "Gauging the Fat of the Land," February 25, 1985).

In addition to previously reported risks of high blood pressure, abnormally high levels of cholesterol in the blood and adult diabetes, the National Institutes of Health panel on obesity said "obesity has been linked to an increased risk of cancers of the colon, rectum, and prostate in men and cancers of the gall bladder, bile passages, breast, cervix, ovaries, and uterus in women" (*The Washington Post*, "Obesity Is 'Killer Disease" Affecting 34 Million Americans," February 14, 1985).

D. Psychological Effects

In confronting the problem of obesity, both victims and doctors are forced to deal with the psychological aspects of this disease. It appears that controversy exists as to what, if any, psychological burden obese individuals carry. Popular belief has assumed for some time that obese individuals suffer a significant psychological burden because of the social stigma associated with being overweight. However, some psychologists are increasingly reporting that obese individuals do not suffer any more severe psychological problems than nonobese individuals. Apparently, obese individuals who do suffer psychologically do so as a response to social pressure which says "Be thin." The following quotes exemplify the existing controversy.

"Surprisingly, and contrary to popular belief, obese populations manifest no more psychological disturbance than do nonobese populations" (*The American Journal of Psychiatry*, "Psychological and Social Aspects of the Surgical Treatment of Obesity," April 1986).

Although many obese persons are discriminated against, most fat people admit that they don't like their bodies. Generally speaking though, obese people do not appear to have any more psychological problems than normal weight people (*Chicago Tribune*, "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

"Obesity creates an enormous psychological burden. In fact, in terms of suffering, this burden may be the greatest adverse effect of obesity" (*Consumers' Research*, "Latest Finding on Obesity and Health," April 1985).

Dr. Albert Stunkard points out that the suffering associated with the psychological consequences of obesity probably exceeds that associated with the phsyical consequences (*Journal of the American Medical Association*, "Experts Hold Hope for Obesity Treatments," November 7, 1986).

While it is not agreed upon as to what degree of psychological burden obese people suffer, it appears clear that those who do suffer psychologically do so because of ever-increasing social pressure and the stigma and labeling associated with being obese. Some psychologists propose that if the social stigma associated with obesity was reduced the psychological burden obese people carry could be eliminated. Evidence which supports this assertion comes from cultures where obesity is more socially accepted. For instance, obese inhabitants of Italian-American communities (where obesity is accepted) have reported excellent health conditions and no psychological problems. This suggests that the stress associated with being overweight may contribute importantly to health problems (Wooley, Susan C. And Wooley, Orland W. University of Cincinnati, "Eating Disorders: Obesity and Anorexia,").

Prejudicial images such as laziness and self-indulgence are frequently formed of people suffering from obesity. Obese people often are discriminated against, particularly in employment opportunities. One study has shown that American executives lose $1000/year in income for every excess pound" (*Chemical Week*, "Research Joins the Battle of the Bulge," March 18, 1987).

Not only is discrimination a problem for obese individuals when looking for employment, but labeling, especially for children, is a very common occurance when people relate to obese individuals.

Children as young as six years old describe obese children as "lazy," "dirty," "stupid," and "ugly" (*Smithsonian*, "Weight Regulation May Start in our Cells, Not Psyches," June 1986).

Unfortunately, many who label obese people as lazy and self-indulgent fail to understand that often times overweight people are not trying to be fat or stay fat. Society's tendency to blame obese people for their excessive weight only heightens the psychological burden these individuals must carry.

"Data suggests that it is because the obese are held responsible for their condition that they are disliked" (*Women's Studies International Quarterly*, "Obesity and Women—A Neglected Feminist Topic," January 1979).

Contrary to popular belief, "most fat people do not eat more than most slim people. Most fat people do not want to be fat" (Dyrenforth, Wooley, and Wooley. "Obesity and Women—A Neglected Feminist Topic," January 1979).

"Overweight people do little if anything out of the ordinary to cause them to be fat, and, once fat, only the most extraordinary behavior will enable them to become and remain thin" (*Women's Studies International Quarterly*, "Obesity and Women—A Closer Look At the Facts," January 1979).

Plagued with society's misconceptions about their weight problem and the constant focus on being thin, obese people often exert all their time and energy in an effort to lose the excess weight.

"Efforts to lose weight consume an enormous amount of the energy, interest, time and money of women, in particular, in all social classes, and of all ages. Concern with weight leads, in many women, to a virtual collapse of self-esteem and sense of effectiveness" (*Women's Studies International Quarterly*, "Obesity and Women—A Closer Look At the Facts," January 1979).

"In its most extreme forms, the effort to be slender becomes so central to self-acceptance that all other life activities are relegated to relative unimportance" (Wooley and Wooley. University of Cincinnati, "Eating Disorders: Obesity and Anorexia,").

E. Causes

Even though obesity plagues at last 34 million Americans, there is still no known cause for this disease. There exists a variety of theories as to why people become obese which range from too much caloric intake and too little physical activity to a genetic inheritance of too many fat cells. Recent research seems to be revealing that genetics may be much more influential in determining whether a person becomes obese rather than just simple overeating. The following quotes not only show the existing controversy between what exactly causes obesity, but also reveal the fact that an increasing number of people are now attributing obesity to genes rather than to an abnormal and extreme eating behavior.

"There is no known cause of obesity and, with the exception of treatments more dangerous than obesity itself, no known cure" (*Women's Studies International Quarterly*, "Obesity and Women—A Closer Look at the Facts," January 1979).

"Although little is understood about the causes of obesity, researchers generally agree it is related to too much food and too little physical activity" (*Chicago Tribune*, "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

"Researchers now think that the balance between food intake and energy expenditure is only one factor in obesity. In fact, they believe that as much as 80% of obesity may be attributed to genetic factors" (*Chemical Week*, "Research Joins the Battle of the Bulge," March 18, 1987).

Whether obesity is attributed to genetics or to overeating and a lack of physical activity, it seems that a combination of possible causes can contribute to becoming overweight. Research also seems to be revealing that other factors affect whether or not an individual becomes obese. One significant factor is the amount of television people watch, particularly children. Apparently, increased time in front of the television set increases food intake and subtracts from physicial activity, thus leading to weight gain.

"TV is blamed for increased obesity because the average 24 hours of weekly TV-watching by 6 to 11 year olds cuts down on their exercise and promotes more food consumption," according to Dr. William Dietz of Boston's New England Medical Center (*Chicago Tribune*, "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

A study of more than 13,500 children revealed that the prevalence of obesity increased by 2 percent for each additional hour of TV viewed by 12 to 17 year olds (*Chicago Tribune*, "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

"Food is the most heavily advertised product on children's television, and that tends to increase between-meal snacking and also increases the consumption of the foods advertised," according to Jules Hirsch (*Chicago Tribune*, "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

The location of body fat has emerged as an important predictor of the health hazards associated with obesity. Research show that where a person carries his excess weight plays a major role in determining if the extra fat actually increases the health risk.

It appears that the particular location of excess fat on the body influences the state of health of an obese individual. While the reason for this is unknown, it seems that excess weight carried around the chest or stomach areas puts the individual at higher risk to suffer from such things as heart disease and diabetes (*Time*, "Gauging the Fat of the Land," February 25, 1985).

Another significant factor that causes many obese people to stay obese results out of an inability to make a lifelong commitment to changing one's diet and activities.

Usually weight loss for obese people requires a continued effort and change in lifestyle that often can't be maintained by individuals.

Once people become obese or are less active physically "it is also very difficult for most people to make lifelong changes in their diet and exercise patterns" (*Smithsonian, "Weight Regulation May Start in Our Cells, Not Psyches," June 1986*).

It is difficult to assess why people become obese primarily because no distinctive features of the eating habits of obese people have been determined. Evidence has shown that most obese persons do not consume any more calories than the average lean person.

"More than 20 studies have demonstrated that, on the average, the obese eat no more than the lean. Nor has it been possible to isolate distinctive features of an obese eating style" (Wooley and Wooley, University of Cincinnati, "Eating Disorders: Obesity and Anorexia,").

F. Treatments

Just as no known cause exists for obesity, there is also no known cure. While many overweight people have tried everything from fad diets and exercise to medical weight loss programs, there doesn't seem to be a clear, consistant method available to assure weight loss for everyone. While possible treatment methods are many, effective and successful treatments are too few. For most people, the failure comes not in losing the weight, but in keeping it off for an extended period of time.

In the past, when it appeared that extravagent eating habits were solely responsible for obesity, behavorial modification treatments were employed in hopes of changing the eating styles of overweight persons. However, now that it is known that most obese individuals do not consume any more than a lean person, treatment which seeks to change eating behavoir is pointless and no longer effective on its own (*Women's Studies International Quarterly,* "Obesity and Women—A Closer Look at the Facts," January 1979).

Controversy has arisen as to whether or not overweight people should be encouraged to diet since such a high percentage of those people who lose weight gain it back in a short period of time. Questions have even been raised concerning whether or not the major treatment for obesity, dieting, may also be the major cause of obesity since there is almost inevitable weight gain (*Women's Studies International Quarterly,* "Obesity and Women—A Closer Look at the Facts," January 1979).

Since dieting is often ineffective for an extended period, other treatments are now being explored for treating the severely obese. For example, surgical treatments have been quite effective. At this time, several different types of surgery are available but are usually only performed on those who are morbidly obese.

Three aspects of severe obesity provide a strong rationale for a surgical approach:

(1) These persons have higher rates of mortality and morbidity;

(2) Some obese persons are subject to psychological disturbances related to their obesity;

(3) Conservative treatments (such as dieting) for severe obesity are generally ineffective (*American Journal of Psychiatry,* "Psychological and Social Aspects of the Surgical Treatment of Obesity," April 1986).

"Gastric restriction procedures have become the most widely performed surgical treatment for obesity. They markedly reduce the amount of food that can be consumed at any one time and thus differ radically from intestinal bypass, which permits unlimited consumption subject only to the discomfort of the immediately following diarrhea" (*American Journal of Psychiatry,* "Psychological and Social Aspects of the Surgical Treatment of Obesity," April 1986).

In 1985, the Food and Drug Administration approved the intragestric balloon which follows the concept that by occupying space in the stomach (during inflation) it reduces appetite. In recent studies, the inflated balloon slowed the rate of gastric emptying and decreased liquid and solid food intake (*Journal of the American Medical Association,* "Experts Hold Hope for Obesity Treatments Targeted to Specific Regulatory Miscues," November 7, 1986).

While surgical treatments have proven effective for the severely obese, they are not advised for those who are mildly to moderately obese. This leaves the continued dilemma of how these patients in particular increased activity and a change in lifestyle must be incorporated into their lives. Even if they cannot lose all the excess at least they will be healthier.

"Despite the plethora of diet books and fads that come and go, the only tried and true method of keeping weight off is to adopt permanent changes in eating habits—eating less and eating fewer fatty foods—and getting more physical activity," says Dr. Thomas Wadden of the Unversity Pennsylvania's Obesity Research Group (*Chicago Tribune,* "Killer Disease Stalks 1 of 4 Americans," August 4, 1985).

John F. Monro of Eastern General Hospital of Scotland advocates a multifaceted strategy of treatment, combining surgery with diet, exercise, and behavior modification (*Journal of the American Medical Association*, "Experts Hold Hope for Obesity Treatments Targeted to Specific Regulatory Miscues," November 7, 1986).

Chairman MILLER. Thank you.

Congresswoman Boxer.

Mrs. BOXER. Thank you, Mr. Chairman.

On behalf of Congresswoman Nancy Pelosi and myself, I want to welcome you to both our districts. As it happens, this hospital lies half in hers and half in mine. So, we both welcome you and she had a very full schedule today and has told me I should report in full detail as to this hearing, which I will do.

I just want to take this opportunity, Mr. Chairman, not to make a formal statement, but to once again thank you for your leadership on behalf of all the families and children and youth in this country, and every time I have a chance, I like to point out that it was Congressman Miller who set up this committee. It is the only committee in the House that looks at the condition of children, youth and families.

How important it is. Children are our future, and when we know that a number of them have this problem of eating disorders and we know that is going to affect them the rest of their lives, it seems to me incumbent upon us to look at this issue, and I am very pleased to be here with my colleagues.

Chairman MILLER. Thank you.

Congresswoman Pelosi has submitted a statement which will be made part of the record this morning. I would also like to recognize Robert Duncan, the President of Marshal Hale Memorial Hospital, for a couple of comments.

[Prepared statement of Representative Pelosi follows:]

PREPARED STATEMENT OF HON. NANCY PELOSI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

BEFORE THE SELECT COMMITTEE ON CHILDREN, YOUTH AND FAMILIES
JULY 31, 1987
MARSHALL HALE HOSPITAL
SAN FRANCISCO, CALIFORNIA

Mr. Chairman, Members of the Select Committee on Children, Youth and Families, welcome to San Francisco. Thank you for holding these hearings.

Your interest indicates that the tragedy of eating disorders is finally being taken seriously. Accurate statistics are difficult to find on these diseases; however, research findings estimate that one million teenagers are affected by symptoms of bulimia and anorexia. Current research also reveals that the number of children and young adults who are overweight increases yearly.

Eating disorders are not merely physical illnesses which can be cured through medication and routine treatment; rather, they reflect, and are consequences of, societal pressures to be thin. These are pressures which distort men's and women's images of themselves and lead to the physical manifestations we recognize as eating disorders. Anorexia nervosa, bulimia, obesity - these are all symptoms of problems within our society and culture which must be recognized and treated.

Hearings such as this, in which information from experts in the field is amassed and reviewed, constitute the first step toward understanding and treating diseases which have long been steeped in denial.

Our country enjoys some of the most advanced medical technology, but, somehow, we have overlooked these serious disorders.

I therefore encourage:

1) The further research and development of treatment for eating disorders;

2) The implementation of regulations which will require teachers to be trained to recognize symptoms of eating disorders as well as those of drug abuse;

3) Further commitments, financial and otherwise, which would ensure the continuation of mental health services, both public and private, for counseling and treatment of these illnesses.

Thank you for calling attention to these serious problems.

STATEMENT OF ROBERT B. DUNCAN, PRESIDENT, MARSHAL HALE MEMORIAL HOSPITAL, SAN FRANCISCO, CA

Mr. DUNCAN. I just want to welcome you.

Chairman MILLER. You have to come forward, Robert. We have to get it all on the record or we will all be in front of the Iran Committee.

Mr. DUNCAN. I just want to welcome everybody to today's session and I am pleased that everybody could come out here as scheduled to attend these hearings and hope that there will be some very valuable results.

[Prepared statement of Robert B. Duncan follows:]

Prepared Statement of Robert B. Duncan, Marshal Hale Memorial Hospital, San Francisco, CA

GOODMORNING AND WELCOME TO MARSHAL HALE MEMORIAL HOSPITAL. WE ARE HONORED TO HOST TODAY'S CONGRESSIONAL HEARING ON EATING DISORDERS AND AT THIS TIME I WOULD LIKE TO ACKNOWLEDGE THE DISTINGUISHED MEMBERS OF THE SELECT COMMITTEE ON CHILDREN, YOUTH, AND FAMILIES:

CHAIRMAN MILLER;
CONGRESSMAN COATES FROM INDIANA;
CONGRESSWOMAN BOXER FROM OUR PRECINCT IN SAN FRANCISCO.
I WOULD ALSO LIKE TO ACKNOWLEDGE:
CONGRESSWOMAN PELOSI FROM SAN FRANCISCO;
TODAY'S WITNESSES;
MEMBERS OF THE PRESS;
AND OUR GUESTS.

SINCE THE OPENING OF OUR EATING DISORDERS CENTER THREE YEARS AGO, MARSHAL HALE HOSPITAL HAS ESTABLISHED AN OUTSTANDING REPUTATION FOR OFFERING ADOLESCENTS AND ADULTS WITH THE EVALUATION AND TREATMENT NECESSARY FOR RECOVERY FROM ANOREXIA, BULIMIA AND COMPULSIVE OVEREATING.

WE FEEL A STRONG OBLIGATION AND ARE COMMITTED TO THE COMMUNITY IN PROVIDING EDUCATION ON EATING DISORDERS TO STUDENTS, TEACHERS, PARENTS, EMPLOYERS AND OTHER HEALTH CARE PROFESSIONALS.

TODAY'S CONGRESSIONAL HEARING OFFERS US YET ANOTHER OPPORTUNITY TO INCREASE OUR AWARENESS OF EATING DISORDERS AND TO BETTER UNDERSTAND THE IMPACT THIS SERIOUS HEALTH ISSUE HAS UPON OUR CHILDREN AND THEIR FAMILIES.

Chairman **Miller**. Thank you.

Our first panel will be made up of Krista Brown and Susan Brown, who will be accompanied by Preston Parsons.

Krista is aged seventeen from Santa Rosa, and Susan is the parent of Krista also from Santa Rosa, and Preston Parsons is the staff therapist from Mt. Diablo Hospital in Concord, California.

Also on the panel will be Laurel Mellin, who is the Director of the Center for Adolescent Obesity and Assistant Clinical Professor of Family and Community Medicine and Pediatrics, School of Medicine, University of California, San Francisco.

And Dr. Joel Yager, who is the Medical Director, Adult Eating Disorders Clinic, Professor of Psychiatry, Neuropsychiatric Institute and Hospital, University of California, Los Angeles, and Dr. Patricia Fallon, who is a Clinical Psychologist, Seattle, Washington.

If you will come forward, please, up to the witness table, I think we have enough chairs there. I hope we do.

[Pause.]

Chairman **Miller**. Welcome to the committee. Your written statements will be included in the record in their entirety, and we want you to proceed in the manner in which you are most comfortable. This is a very relaxed committee. I am afraid that all the TV people we have seen over the last several weeks will think that we are here to terrorize our witnesses. We are not. We look forward to what you have to tell us and, Krista, we are going to start with you.

The only thing we are going to ask is that you pull the microphone as close to you as you can so that everybody in the room can hear. We need both mikes because one is for the recorder and one is for the sound system in the room.

STATEMENT OF KRISTA BROWN, AGE 17, SANTA ROSA, CA

Ms. **Brown**. Am I speaking loud enough? Okay. Thanks.

This is a testimony straight from my heart. I just want you guys to know this.

What started as an innocent diet came close to ending my life. I just wanted to get into shape, to be like the petite girls that seemed to have everything, boyfriends, clothes and friends.

I always had the good grades but just was not—but it just was not enough for me. I wanted to be special and to have people like me and I wanted to have lots of friends.

Yet, even though I wanted what the other girls seemed to have, I was scared of growing and developing into a woman. Wearing my first bra, I was so self-conscious that everyone was looking at me.

I thought the way to make myself feel less self-conscious and depressed was just to lose weight and get into shape. Little did I know that the depressed feelings bottled up inside of me did not go away like the weight did. It would only get masked by the false sense of control I got from over-exercising and starving myself.

The less I ate, the better I felt. I felt strong and in control of my body and weight. I thought as soon as I hit my so-called ideal weight, I could stop dieting, but little did I know the magic number would keep getting smaller and smaller until I was even afraid to eat rice cakes, which are zero calories.

It seemed the thinner I became, the fatter I felt, which really did not make sense, until Preston explained the heaviness I felt was from inside out, not outside in. Because I kept all emotions bottled up inside without letting them surface.

I withdrew from family and friends and isolated myself into my anorexic capsule, which protected me from hearing and caring what anybody said about my behavior. I was literally like a machine. I would not stop until I went to bed. My days were set in rigid patterns for eating, exercising and school.

If my patterns were disturbed, I became furious and then I felt a sudden panic that I would not get enough exercise for the amount of food I was eating. Expending more energy than I consumed was my constant goal.

That cycle came to an abrupt halt when my so-called therapist, whom I hated at the time, told me that I had no choice but to admit myself to an in-patient program because I just kept losing more and more weight, becoming more and more possessed by the drive inside of me. Even worse, it was tearing my family apart because I could not see myself as they saw me: a skeletal version of their once healthy daughter who insisted on caring for and feeding everyone except herself.

My mother and father knew that it would some day come to having me go away, but because I always threatened to kill myself if any talk of an in-patient program was mentioned, they never pushed the point, for they knew I never said anything I did not mean.

When we did finally enter Mt. Diablo Hospital in Concord, I was to the point where deep inside I knew I had no other choice but to go. I was eighty-seven pounds and sort of tired of the endless repetition of my torturous days.

The first visit to Mt. Diablo, I stayed a month, and I felt like I wanted to go crazy. I felt fat and out of control, but I ate and played along with the program so they would let me go home. Unfortunately, I was not ready to give my anorexic habits up, and I started restricting my food the first day I was home. Slowly, I started restricting and exercising more, which ended in weight loss.

This cycle went on for about six months, becoming worse as the days wore on, but old habits are hard to break, especially when you do not want to break them.

By the end of the six months, I was at my lowest weight of seventy-eight pounds and five-seven, and I was a walking time bomb. Even though I tried to hide my weight loss and restricting, my mother was no fool. She took me to a doctor who sent me immediately back to Mt. Diablo Hospital as a medical risk.

When I arrived, I almost collapsed with exhaustion and I finally surrendered. I finally wanted to get better and I was willing inside to fight the anorexic behaviors instead of giving into them. I spent two months working hard on eating, emotions and building an innerself. I left Mt. Diablo Hospital at ninety-three pounds and when I went home that time, I did not restrict or exercise, even though the temptation was not gone.

I just decided I did not want to waste all the hard work I did over those two months of the program, but mainly I did not want to starve myself anymore.

It has been five months since I left Mt. Diablo Hospital and I am still trekking along, gaining slowly, and am just a few pounds from my goal, healthy weight. I am the happiest I have ever been in my life because through my experience with anorexia, I was able to build the innerself I never had before.

I feel I know that I deserve to feed and take care of myself, not just everybody else. Since I have been home, there have been many emotional obstacles set in my path, but I have found the inner strength to approach and conquer those obstacles without hurting myself.

If I had not had the Serenity Program and the therapy of Preston, I would have died. I have shared my experience with an eating disorder today to make you realize that they can kill without the proper treatment.

I hope that I have made it clear that eating disorders are not a joking matter, and if we do not take a stand, many young girls are going to end their lives with an obsession.

[Prepared statement of Krista Brown follows:]

Prepared Statement of Krista Brown, Santa Rosa, CA

This is a testimony of truth straight from my heart. What started as an innocent diet, came close to ending my life. I just wanted to get into shape. To be like the petite girls who seemed to have everything: boyfriends, clothes, and friends. I always had the good grades but that just wasn't enough for me. I wanted to be special, to have people like me and want to be my friend.

Yet, even though I wanted what the other girls seemed to have, I was scared of growing up and developing into a woman. Wearing my first bra was a dramatic experience because I was so self-conscious that everyone was looking at my body. I thought the way to make myself feel less self-conscious and depressed was just to lose weight and get into shape. Little did I know that the depressed feelings bottled up inside me wouldn't disappear with the weight, they would only get masked by the false sense of control I got from over-exercising and starving myself. The less I ate the better I felt. I felt strong and in control of my body and weight.

I thought as soon as I hit my so called "ideal weight," I could stop dieting, but little did I know the magic number would keep getting smaller and smaller until I was even afraid to eat rice cakes which are almost 0 calories. It seemed the thinner I became, the fatter I felt which really didn't make sense until Preston explained that the heaviness I felt was from the inside out not the outside in. Because I kept all my emotions bottled up inside without letting them surface, I withdrew from family and friends, and isolated myself in my anorexic capsule which protected me from hearing and caring what anybody said about my behavior. I literally was like a machine. I wouldn't stop until I went to bed. My days were set in rigid patterns for eating, exercising and school. If my patterns were distrubed, I became furious, and then I felt a sudden panic that I wouldn't get enough exercise for the amount of food I was eating. Expending more energy than I consumed was my constant goal.

But that cycle came to an abrupt halt when my so-called therapist (whom I hated) told me that I had no choice but to admit myself to an inpatient program because I just kept losing more and more weight, becoming more and more possessed by the drive inside of me. Even worse, I was tearing my family apart because I couldn't see myself as they saw me: a skeletal version of their once healthy daughter who insisted on caring for and feeding everyone except herself.

My mother and father knew that it would someday come to my having to go away, but because I always threatened to kill myself if any talk of an inpatient program was mentioned, they never pushed the point for they knew I never said anything I didn't mean.

When we did finally interview at Mt. Diablo Hospital in Concord, I was to the point where deep inside I knew I had no other choice but to go. I was 87 pounds and tired of the endless repetition of my torturous days. The first visit to Mt. Diablo I stayed a month, and I felt like I wanted to go crazy. I felt fat and out of control, but I ate and played along with the program so they'd let me go home.

Unfortunately, I wasn't ready to give my anorexic habits up, and I started restricting my food the first day I was home. Slowly I started restricting more and exercising more which ended in weight loss. This cycle went on for about 6 months becoming worse as the days wore on, but old habits are hard to break especially when you really don't want to break them. By the end of the 6 months, I was at my lowest weight of 78 pounds, and I was a walking time bomb. Even though I tried to hide my weight loss and restricting, my mother was no fool. She took me to our doctor who sent me immediately back to Mt. Diablo hospital as a medical risk.

When I arrived I almost collapsed with exhaustion and I finally surrendered. I finally wanted to get better and I was willing inside to fight the anorexic behavior instead of giving in to it. I spent 2 months away working hard on eating, emotions and building an inner self. I left Mt. Diablo at 93 pounds and when I went home that time I didn't restrict or over-exercise even though the temptation wasn't gone. I just decided I didn't want to blow all the hard work I did over those two months of the program. But mainly I didn't want to starve myself anymore.

It has been five months since I left Mt. Diablo, and I'm still trucking along gaining slowly and I'm just a few pounds from my goal healthy weight. I'm the happiest I've been in my life because through my experiences with anorexia I was able to build the inner self I never had before. I feel now that I deserve to feed and take care of myself, not just everybody else. Since I have been home, there have been many emotional obstacles set in my path, but I have found the inner strength to approach and conquer those obstacles without hurting myself. If I had been left without a program and the therapy of Preston, I would have died.

I have shared my experience with an eating disorder today to make you realize that they can kill without the proper treatment. I hope that I made it clear that eating disorders aren't a joking matter, and if we don't take a stand many young girls are going to end their lives with an obsession.

Chairman MILLER. Thank you very much, Krista.

Mrs. BROWN. Can you hear? Can you hear me?

Chairman MILLER. Pull the one on your right a little closer to you.

[Pause.]

STATEMENT OF SUSAN BROWN, PARENT, SANTA ROSA, CA; ACCOMPANIED BY PRESTON PARSONS, LCSW, STAFF THERAPIST, SERENITY PROGRAM, MT. DIABLO HOSPITAL, CONCORD, CA

Mrs. BROWN. Okay. Now, can you hear me? I talk a little softly, so let me know if you cannot hear.

To begin with, I am very nervous. If any of you have trouble hearing, it is really hard to talk about this type of thing because it is a really emotional subject. It is the first time I have ever really talked about it. I wrote everything down and I am going to read from that.

I have been asked to present to you my experience with the disease called anorexia nervosa and how it affected my life and that of my family.

What you are about to hear is the testimony of truth and at this point some expertise that is also my heart.

In 1983, my daughter, Krista, aged thirteen, and I began a very well-meaning eating program together. Both of us thought that this would be a perfect opportunity to help each other get in shape and strive for better figures. This was the beginning of a whole new chapter in our lives.

When you try to explain to anyone about eating disorders, there are many misconceptions and generally a lot of misinformation. This is why I hope today we can clarify and possibly make some of these things more comprehensible.

My daughter, Krista, was always a very quiet, extremely cooperative girl. Although she was very shy, she was always concerned about everyone's welfare around her. My communication with her was such that on the surface, I thought she is doing fine. Little did I know that the disease, and I do want to stress disease, was taking hold.

Krista slowly began an unusual pattern of behavior in almost all aspects of her every-day life. She started to withdraw and her behavior patterns became even more pronounced. She would soon fall into a daily routine so rigid and obsessive that to stand back and watch her was like watching a robot.

During this period of time, she gained more confidence and strength but it was under a false pretense because, in reality, it was the anorexia gaining control. The family suffered to understand what no one yet could possibly understand.

As a mother, I tried all approaches to help my daughter eat. We were desperate. Krista was dying right before our eyes and nothing we could do could help her to see that. The more I battled with her, the more the disease fought me back. In a matter of a year, we placed Krista in Palm Drive Hospital to run expensive tests. Upon her dismissal, she was soon back to the same obsessiveness but this time with a vengeance.

I lost almost all control and what was once a wonderful person had turned into a driven time bomb ready to explode. Therapy had been unsuccessful up to this point. When anorexia takes over the mind, it also takes over physically all over the body.

The strength and power the victims feel is a false energy and under this false well-being, the body begins to break down. When not nurtured for a long time, the inside balance, red and white cell balance, and, most importantly, electrolyte balance, all go out of sync.

Through a therapist's recommendation, we were given Mt. Diablo Medical Center's phone number and urged to have Krista admitted there as an in-patient. This was a very painful, costly, but a necessary decision. The decision turned out to be a blessing, though I felt I had to trade her. I was questioning myself as to what more I could have done to help her.

The people at the Serenity Unit knew. They interviewed our entire family and explained to Krista how the program worked. She was admitting at this point that she was in need of help, but not yet willing to fight the monster that had taken over her mind and her body.

Her in-patient stay was thirty days that first time, at which point she returned home, educated and semi-willing to cooperate, but I could sense it was not over. Your first hope is that it will magically disappear, but you soon discover how powerful anorexia is.

Her denial and lack of fight almost cost Krista her life. Six months after the in-patient visit, I looked at a broken down body, her sunken skeleton face and something gave me a strength I had never felt.

I took control and I got her to our family doctor. He was horrified by her condition. At this point, she had lost almost all of her vital signs and was hardly pumping any blood to her heart. She was in extremely critical condition, and we acted immediately and placed her again in Mt. Diablo.

This time, it was different. Krista, after three years of pure hell, broke down from the strain. The anorexia was at last her enemy and she was willing to go to war fighting.

Her willingness to battle her illness helped her to receive a new life through the expertise of an excellent group of experts and especially that of her therapist, Preston Parsons. Preston is the only person who was ever able to connect with Krista and truly helped her fight her way back to wellness.

I think that the hardest thing for me to accept in all these three and a half years is the fact that there is no cure for anorexia. It is a disease that can be controlled but not eliminated. That is so important to understand.

Krista has learned that she is a viable person and worth nurturing, but the sacrifice and battles have left scars.

Anorexia nervosa has taught my family and I to overcome some very hurtful obstacles, but I feel I have grown from it and have a greater understanding of life in general.

Krista is recovering now and working very hard every day to keep the disease under control. It has given her a strong inner strength that few of us will ever experience.

She went to war against this disease, but, sadly, there is not ever a total surrender but rather a constant awareness of what lies ahead. It has made her stronger than most and I feel secure in saying she will be the one in control now. Without the skill and devotion of the staff at the Serenity Unit, I can assure you I would have lost my daughter.

In conclusion, I would like to say eating disorders are both mental and physical diseases. It may be a disease of the fast-paced world we live in but, nevertheless, it is for real and it has to be recognized. Hundreds of people are dying every year from these disorders and I pray this will change with the help and understanding of our legislators and any of you that could help that deem it necessary.

To recover from this illness, you need intensive medical and psychological attention and some people cannot receive this. To lose life because of a lack of understanding is a sin.

Thank you for hearing my story and, hopefully, my daughter an I can set an example for you to learn by.

[Prepared statement of Susan Brown follows:]

PREPARED STATEMENT OF SUSAN BROWN, PARENT, SANTA ROSA, CA

I have been asked to present to you my experiences with a disease called Anorexia Nervosa and how it affected my life and that of my family. What you are about to hear is a testimony of truth and at this point, some expertise, but all from my heart.

In 1983 my daughter Krista, at age 13, and myself began a very well meaning eating program together. Both of us thought that this would be a perfect opportunity to "help" each other get in shape and strive for our "better figures." This was the beginning of a whole new chapter in our lives.

When you try to explain to anyone about eating disorders, there are many misconceptions and generally a lot of misinformation. This is why I hope today we can clarify and possibly make some of these things more comprehensible.

My daughter Krista was always a very quiet, extremely cooperative girl. Although very shy she was always concerned about everyone's welfare around her. My communication with her was such that on the surface I thought she was doing just fine. Little did I know that the disease, and I do want to stress "disease," was taking hold.

Krista slowly began unusual patterns of behavior in almost all aspects of her everyday life. She started to withdraw, and her behavior patterns became even more pronounced. She soon was following a daily routine so rigid and obsessive that to stand back and watch her was like watching a robot. During this period of time she gained more confidence and strength but it was under a false pretense because in reality it was the anorexia gaining control.

The family suffered to understand what no one yet could possibly understand. As a mother, I tried all approaches to try to help my daughter eat. We were desperate. Krista was dying right before our eyes and nothing we could do could help her to see that. The more I battled with her, the more the disease fought me back.

In a matter of a year we placed Krista in Palm Drive Hospital to run extensive tests. Upon her dismissal she was soon back to the same obsessiveness but this time a vengeance. I lost almost all control and what was once a wonderful person, had turned into a driven "time bomb" ready to explode. Therapy had been unsuccessful up to this point. When anorexia takes over the mind it also physically takes over the body. The strength and power the victim feels is a false energy and under this false well being the body begins to break down. When not nurtured for a long period of time the enzyme balance, red and white cell balance, and most importantly electrolyte balance all go out of sync.

Through a therapist's recommendation we were given Mount Diablo Medical Center's phone number and urged to have Krista admitted there as an in-patient. This was a very painful, costly but necessary decision. This decision turned out to be a blessing, though I felt I was betraying her and questioning myself as to "what more I could have done to help her." The people at the "Serenity Unit" knew. They interviewed our family and explained to Krista how the program worked.

She was admitting at this point that she was in deep need of help but was not yet willing to fight the monster that had taken over her mind and body. Her in-patient stay was thirty days at which point she returned home educated and semi-willing to cooperate but I could sense it wasn't over. Your first hope is that it will magically disappear but soon you discover how powerful anorexia is.

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Her denial and lack of fight almost cost Krista her life. Six months after the first in-patient visit I looked at her broken down body and her sunken skeleton face and something gave me strength I had never felt. I took control and got her to our family doctor. He was horrified by her condition. At this point she had lost almost vital signs and was hardly pumping any blood with her heart. She was in extremely critical condition. We acted immediately and placed her again in Mount Diablo. This time was different.

Krista, after three years of pure hell, broke down from the strain. The anorexia was, at last, her enemy and she was willing to "go to war" to fight it.

Her willingness to battle her illness helped her to receive and utilize the expertise of an excellent group of experts and especially that of her therapist, Preston Parsons.

Preston is the only person who was able to connect with Krista and truly helped her fight her way back to wellness.

I think the hardest thing for me to accept in all these three and one-half years is the fact that there is no cure for anorexia nervosa. It's a disease that can be controlled, but not eliminated.

Krista has learned that she is a valuable person and worth nurturing but the sacrifices and battles have left scars.

Anorexia Nervosa has taught my family and I to overcome some very hurtful obstacles, but I feel I have grown from it and have a greater understanding of life in general.

Krista is recovering now and working hard everyday to keep the disease in control. It has given her a strong inner-strength that few of us ever experience.

She went to war against this disease but sadly there is not ever a total surrender but rather a constant awareness of what lies ahead. It's made her stronger than most and I feel secure in saying she'll be the one in control now. Without the skill and devotion of the staff at the "Serenity Unit" I can assure you I would have lost my daughter.
In conclusion I would like to say, eating disorders are both a mental and physical disease. It may be a disease of the fast-paced world we live but nevertheless they are for real and have to be recognized. Hundreds of people are dying every year from these disorders and I pray this can change with the help and understanding of our legislators and anyone else who deems it necessary.

To recover from this illness you need intense medical and psychological attention and some cannot receive this. To lose a life because of a lack of understanding is a sin. Thank you for hearing my story and hopefully my daughter and I can set an example for you to learn by.

Chairman **Miller**. Thank you.

Preston, do you have anything to say?

Mr. **Parsons**. I do not have any prepared statement.

Chairman **Miller**. We will have some questions later.

All right. We are going to hear from the rest of the witnesses and then we will have some questions.

Who is next here? Laurel.

STATEMENT OF LAUREL M. MELLIN, MA, RD, DIRECTOR, CENTER FOR ADOLESCENT OBESITY; ASSISTANT CLINICAL PROFESSOR OF FAMILY AND COMMUNITY MEDICINE AND PEDIATRICS, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CA

Ms. **Mellin**. I just also wanted to thank you for sharing your story.

Eating and weight problems are now alarmingly common in children and adolescents. Although extreme problems, such as the anorexia that you have just heard about, and bulimia, affect a small segment of our young, characteristics associated with both eating disorders, such as fear of fat, restrained eating, binge eating, and distortion of body image, are nearly ubiquitous in girls.

In our study of 494 female children and adolescents, a full eighty percent of ten-year-olds reported currently dieting to lose weight and approximately fifty percent reported fear of becoming fat and engaged in binge eating episodes.

Moreover, we know that children with excessive body fat exhibit these characteristics and that obesity currently affects twenty-seven percent of our children and twenty-two percent of our adolescents.

Although clinical observations suggest that the prevalence of eating disorders and their characteristics in young people has increased, confirming scientific data are unavailable. It is clear that obesity has increased markedly.

In the last fifteen years, according to a recent analysis of nationally-representative population standards, obesity in children has increased a startling fifty-four percent and in adolescents, thirty-nine percent.

How serious are these problems in our young people? The answer is that we know very little about the effects of disordered eating characteristics. We know that bulimia and anorexia are potentially life-threatening and often portend life-long difficulties.

Childhood and adolescent obesity have immediate and long- term psycho-social disadvantages, particularly among females. The medical risk of obesity is primarily related to its persistence into adulthood, and the severity of the obesity. As many as seventy percent of obese adolescents will become obese adults. Obesity's effect on risk of disease has been documented by major national studies in the last five years.

Thus, it is predicted that this increased prevalence of obesity will cause increases in adult obesity-associated diseases, such as hypertension, orthopedic conditions, diabetes, gall bladder disease, cardio-vascular disease, and certain kinds of cancer.

If eating disorders and their characteristics are on the rise and since obesity has clearly and dramatically increased, we must ask why. The answer is that we do not know. These disorders are multi-factorial and diverse in origins and scientific data are relatively scant. Yet, there are some data that suggest possible contributors to this disturbing trend.

Inactivity. Studies show that physical fitness has declined among our youth. Physically unfit, inactive children have reduced energy needs and are more prone to over-eating. Some work suggests that a critical level of activity may be important to proper appetite regulation.

An analysis of national data shows a strong association between obesity and the sedentary activity of television viewing. We also know that children are viewing more television. The mean weekly viewing hours of twelve to seventeen year olds, according to a Nielsen report, is 18.8 hours in 1968–70, rising to 22.8 hours in 1986–87.

Dieting. The prevalence of dieting increases with age as kids are socialized into a "weight-ist" society and learn to fear becoming fat, to perceive themselves as fat, to diet and to binge. Dieting and pursuit of thinness is a national obsession that children learn from their parents and their peers and soak in day by day from the media.

Dieting causes binge eating, which in turn proliferates fatness. The over-restriction of food is the first step toward an often painful secret life of weight and diet preoccupation. One sixteen-year-old girl revealed to me that she spent at least seventy percent of her time thinking about her diet and weight.

Food. Our rapidly-changing food supply may contribute to the problem. Highly palatable, quick-to-fix, high caloric density foods are readily available to our children. They merely pull a colorful box out of the freezer, peel off its plastic skin and pop it into the microwave, a far cry from wholesome basic foods slowly simmered on the back burner.

In addition, we have more from which to choose and variety is thought to be associated with fatness. The number of items available in grocery stores in 1976 was 9,000. In 1986, it jumped to 19,857.

Sex roles. Although both sexes are vulnerable to dieting and weight preoccupation, girls are overwhelmingly more likely to exhibit eating disorders.

During the last fifteen years, obesity in adolescent girls increased fifty-eight percent with only eighteen percent increase in boys. This discrepancy may well be the result of early, constant and pronounced weight preoccupation and restrictive dieting.

One Berkeley teen recalled as a normal weight seven-year-old being admonished by her mother to pull in her stomach at school so that other children would like her.

The expansion of options for women during the last decade has seemingly broadened the opportunity for relying on characteristics other than weight for self-worth. Yet, for many, these changes have caused more role confusion, higher expectations and greater focus on external indicators of worth. The instability of women's roles appears to leave many only more vulnerable to the mandate of thinness.

Family. Family dysfunction, particularly the chaotic or enmeshed family, has been implicated in eating disorders. We will report this fall on a new study of family functioning of obese adolescents using the youth evaluation scale that revealed that forty-six percent of families surveyed were chaotic, whereas only thirteen percent would be expected to be chaotic.

Unfortunately, we do not have scientific data to show trends over time in family interaction that could be associated with these disorders. Clinically, we see a shift toward more family chaos, which appears to affect children's nutritional practices and sense of security and well-being.

It is likely that changes in the family during the last fifteen years have contributed to childhood weight and eating problems. Mother's increasing presence in the work place, father's failure to pick up the residual fifty percent of parenting, the employer's insensitivity to the needs of families, poor availability of enriching after-school programs, and marital instability resulting in single parents and blended families, often place excessive demands on parents.

When the family is distressed, the children may not benefit from the emotional support and functional family life they need. With limited time and little guidance from an extended family, parents have less confidence in their own parenting skills. Some conform to the success orientation of "other parents" and push their children to be successful, with attaining thinness an important dimension of that pursuit.

Other parents are over-protective and hesitant to set limits and follow through for fear of alienating their children. In both instances, the children are not likely to receive the balance of warm, nurturing support and effective limit-setting that protects them from exhibiting various forms of distress, including eating and weight problems.

The media. The manufactured perfection of the media sets destructively unattainable goals for our children and youth. The weightism, mandate of thinness and fat phobia that are ingrained in almost every American, regardless of weight, are compounded by the media.

The message is that you are your image. Your worth is not intrinsic. It does not emanate from humanistic attributes, such as compassion, loyalty and kindness, and if your body does not conform to that narrow range of thinness, then you are wrong, sinful, slothful, out of control and invisible, particularly to the opposite sex.

Television programming proliferates fat hatred by ridiculing obese people. Advertising shows little social responsibility to its influence on children's attitudes and behaviors related to body size and eating.

These trends in eating and weight problems in our young suggest the need for closer scrutiny of the treatment of incipient and entrenched problems as well as their prevention.

With respect to treatment, eating and weight problems in children and adolescents require sensitive and comprehensive evaluation to differentiate normalcy from pathology, to assess medical and psycho-social risks, to identify contributors to the problem and, ultimately, to develop an appropriate care plan.

Eating disorders are cared for in specialized interdisciplinary centers which have proliferated during the last five years. Directors will be speaking later today.

When these comprehensive services are unavailable or unaffordable, young people are often provided unidisciplinary care, typically psychotherapy, that may miss important medical, nutritional and family aspects of care.

Little professional attention has been afforded to the treatment of childhood and adolescent obesity. We know that comprehensive and low-risk treatment, when delivered by interdisciplinary health professional teams, are effective in producing weight loss in children and adolescents. For instance, the program developed at the University of California, San Francisco, avoids diets, yet shows effectiveness in helping families to change their lifestyle in support of the adolescent's weight loss.

In contrast, commercial programs stress quick weight loss, rigid diets and neglect such critical aspects of care as family involvement and exercise. The consequences may include nutritional deficiencies, delayed growth and development, binge eating and weight preoccupation. Adolescents who are subjected to periods of restrictive dieting by commercial weight programs almost invariably become binge-eaters.

Prevention. Although the prevention of eating and weight problems in our youth begins with the family and relates to the personal choices and relationships of family members, there are some strategies that have policy implications that I recommend:

Parenting support and education. The first line of prevention is the well-being and awareness of the family. After school programs that enhance the child's development, and which include healthful nutrition and safe physical education, should be readily available. Employers should be encouraged to develop policies that support the employee's functioning within the family. For instance, allowing flexibility of hours to meet the needs of the family.

Educational materials should be available that support parents in guiding their children toward healthy attitudes toward food, exercise and weight.

Reinstatement of school athletic programs. In many states, physical education budgets have been seriously cut and requirements for participation are minimal or non-existent. Athletic program budgets and participation requirements should be enhanced.

Activities should stress aerobic exercise and the development of skills in activities that can be continued during adulthood. In addition, with so many adolescents obese and unfit, programs appropriate for the low fit youngster should be offered.

Food availability in schools. To the extent to which the consumption of high—caloric density foods—doughnuts, candy bars, potato chips, promotes weight gain and that subsequent dieting that promotes disordered eating and obesity, the availability of such foods within the schools should be moderated.

In many schools, high fat, high sugar foods are ubiquitous. A broader range of alternatives, such as salad bars, fruit stands and sandwiches made with whole grain bread, should be readily available.

Public service messages and responsible programming. Television and radio programming should avoid weightism just as assiduously as it monitors other forms of discrimination. Public service announcements should be developed that relate directly to the fear of fat, binge eating and weight preoccupation.

Our children are troubled by too much dieting, too much weight preoccupation and, in many cases, too much fat. We do not want to create another generation of dieters who, the harder they diet, the more troubled and ponderous they become.

It is critical that more private and public sector support and attention be devoted to the prevention and treatment of weight and eating problems in our young people.

[Prepared statement of Laurel Mellin follows:]

PREPARED STATEMENT OF LAUREL M. MELLIN, DIRECTOR, CENTER FOR ADOLESCENT OBESITY, ASSISTANT CLINICAL PROFESSOR OF FAMILY AND COMMUNITY MEDICINE AND PEDIATRICS, SCHOOL OF MEDICINE, UNIVERSITY OF CALIFORNIA, SAN FRANCISCO, CA

Eating and weight problems are now alarmingly common in children and adolescents. Although extreme problems such as anorexia and bulimia affect a small segment of our young, characteristics associated with eating disorders, such as fear of fat, restrained eating, binge eating, and distortion of body image are nearly ubiquitous in girls. In our study of 494 female children and adolescents a full 80 percent of 10-year-olds reported currently dieting to lose weight and approximately 50 percent reported fearing becoming fat and engaging in binge eating episodes. Moreover, we know that children with excessive body fat exhibit these disordered eating characteristics and that obesity currently affects 27 percent of our children and 22 percent of our adolescents.

Although clinical observation suggests that the prevalence of eating disorders and their characteristics in young people has increased, confirming scientific data are unavailable. However, it is clear that obesity has increased markedly. In the last fifteen years, according to a recent analysis of nationally representative population samples, obesity in children has increased a startling 54 percent and in adolescents, 39 percent.

How serious are these problems in our young people? The answer is that we know little about the effects of disordered eating characteristics. Bulimia and anorexia are potentially life-threatening and often portend lifelong difficulties. Childhood and adolescent obesity have immediate and long term psychosocial disadvantages, particularly among females. The medical risk of obesity is primarily related to its persistence into adulthood. Age and the severity of the obesity affect the risk of its persistence. As many as 70 percent of obese adolescents will become obese adults. Obesity's effect on risk of disease has been documented by major studies published in the last five years. Thus it is predicted that this increased prevalence of obesity will cause increases in adults in obesity-associated disorders such as hypertension, orthopedic conditions, type II diabetes (adult hyperinsulemic diabetes), gallbladder disease, cardiovascular disease, and certain types of cancer.

If eating disorders and their characteristics are on the rise and since obesity has clearly and dramatically increased, we must ask why. The answer is that we don't know. These disorders are multifactorial and diverse in origins and scientific data are relatively scant. Yet there are some data that suggest possible contributors to this disturbing trend:

INACTIVITY - Studies show that physical fitness has declined among our youth. Physically unfit, inactive children have reduced energy needs and are more prone to overeating. Some work suggests that a critical level of activity may be important to proper appetite regulation. An analysis of national data showed a strong association between obesity and the sedentary activity of television viewing. We also know that children are viewing more television. The mean weekly viewing hours of 12- to 17-year-old according to a Nielsen report was 18.8 hours in 1968-70, rising to 22.8 hours in 1986-87.

DIETING - The prevalence of dieting increases with age as children are socialized into a weightest society and learn to fear becoming fat, to perceive themselves as fat, to diet and to binge. Dieting and pursuit of thinness is a national obsession that children learn from their parents and peers and soak in day-by-day from the media. Dieting causes binge eating which in turn proliferates fatness. The overrestriction of food is the first step toward an often painful secret life of weight and diet pre-occupation. One 16-year-old girl revealed to me that she spent at least 70% of her time thinking about her diet and weight.

FOOD - Our rapidly changing food supply may contribute to the problem. Highly palatable, quick to fix, high caloric density foods are readily available to our children. They merely pull a colorful box out of the freezer, peel off its plastic skin and pop it into the microwave, a far cry from wholesome basic foods slowly simmered on the back burner. In addition, we have more from which to choose and variety is thought to be associated with fatness. The number of items available in grocery stores in 1976 was 9,000. In 1986 it jumped to 19,857.

SEX ROLES - Although both sexes are vulnerable to.dieting and weight preoccupation, girls are overwelmingly more likely to exhibit eating disorders. During the last 15 years obesity in adolescent girls increased 58% compared with 18% in boys. This discrepancy may well be the result of early, constant and pronounced weight proccupation and restrictive dieting. One Berkeley teen recalled as a normal weight 7-year-old being admonished by her mother to pull in her stomach at school so that other children would like her. The expansion of options for women during the last decade has seemingly broadened the opportunity for relying on characteristics other than weight for self-worth. Yet for many these changes have caused more role confusion, higher expectations and greater focus on external indicators of worth. The instability of women's roles appears to leave many only more vulnerable to the mandate of thinness.

FAMILY - Family dysfunction, particularly the chaotic or enmeshed family, has been implicated in eating disorders. We will report this fall on a new study of family functioning of obese adolescents using the Youth Evaluation Scale (Y.E.S.) that revealed that 46 percent of families surveyed were chaotic whereas only 13 percent would be expected to be chaotic. Unfortunately, we do not have scientific data to show trends in family interaction. Clinically we see a shift toward more family chaos which appears to affect children's nutritional practices and sense of security. It is likely that changes in the family during the last fifteen years have contributed to childhood weight and eating problems. Mother's increasing presence in the workplace, father's failure to pick up the residual 50 percent of parenting, the employer's insensitivity to the needs of families, poor availability of enriching after-school programs, and marital instability resulting in single parents and blended families - often place excessive demands on parents. When the family is distressed, the children may not benefit from the emotional support and functional family life they need. With limited time and little guidance from an extended family, parents have less confidence in their own parenting skills. Some conform to the success orientation of "other parents" and push their children to be successful, with attaining thinness an important dimension of that pursuit. Other parents are overprotective and hesitant to set limits and follow through for fear of alienating their children. In both instances the children are likely not to receive the balance of warm, nurturing support and effective limit-setting that protects them from exhibiting various forms of distress, including eating and weight problems.

MEDIA -The manufactured perfection of the media sets destructively unattainable goals for children and youth. The weightism, mandate of thinness and fat phobia that are ingrained in almost every American, regardless of weight, are compounded by the media. The message is that you are your image; your worth is not instrinsic. It does not emanate from humanistic attributes such as compassion, loyalty or kindness. And if your body does not conform to that narrow range of thinness then you are wrong, sinful, slothful, out-of-control, and invisible - - particularly to the opposite sex. Television programming proliferates fat hatred by ridiculing obese people. Advertising shows little social responsibility to its influence on children's attitudes and behaviors related to body size and eating.

These trends in eating and weight problems in our young suggest the need for closer scrutiny of the treatment of incipient and entrenched problems as well as their prevention.

TREATMENT - Eating and weight problems in children and adolescents require sensitive and comprehensive evaluation to differentiate normalcy from pathology, to assess medical and psychosocial risks, to identify contributors to the problem and, ultimately, to develop an appropriate care plan. Eating disorders are cared for in specialized interdisciplinary centers which have proliferated during the last five years. When these comprehensive services are unavailable or unaffordable, young people are often provided unidisciplinary care - typically psychotherapy - that may miss important medical, nutritional and family aspects of care is provided.

Little professional attention has been afforded to the treatment of childhood and adolescent obesity. We know that comprehensive low-risk treatment when delivered by interdisciplinary health professional teams are effective in producing weight loss in children and adolescents. For instance, the SHAPEDOWN Program developed at the University of California, San Francisco avoids diets yet has shown effectiveness in helping families change their lifestyle in support of the adolescent's weight loss. In contrast commercial programs stress quick weight loss, rigid diets and neglect such critical aspects of care as family involvement and exercise. The consequences may include nutritional deficiencies, delayed growth and development, binge eating and weight preoccupation. Adolescents subjected to periods of restrictive dieting by commerical weight programs almost invariably become binge-eaters.

PREVENTION - Although the prevention of eating and weight problems in our youth begins with the family and relates to the personal choices and relationships of family members, there are some strategies that have policy implications that I recommend: **Parenting support and education** - The first line of prevention is the well-being and awareness of the family. Afterschool programs that enhance the child's development and which include healthful nutrition and safe physical education should be readily available. Employers should be encouraged to develop policies that support the employee's functioning within the family, for instance, allowing for flexibility of hours to meet the needs of the family. Educational materials should be available that support parents in guiding their children toward healthy attitudes toward food, exercise and weight.

Reinstatement of school athletic programs - In many states, physical education budgets have been seriously cut and requirements for participation are minimal or non-existent. Athletic program budgets and participation requirements should be enhanced. Activities should stress aerobic exercise and the development of skills in activities that can be continued during adulthood. In addition, with so many adolescents obese and unfit, programs appropriate for the low fit youngster should be offered.

Food availability in schools - To the extent to which the consumption of high caloric density foods - doughnuts, candy bars, potato chips - promotes weight gain and that subsequent dieting promotes disordered eating and obesity, the availability of such foods within the schools should be moderated. In many schools high fat, high sugar foods are ubiquitous. A broader range of alternatives, such as salad bars, fruit stands and sandwiches made with whole grain breads, should be readily available.

Public service messages and responsible programming - Television and radio programming should avoid weightism just as assiduously as it monitors other forms of discrimination. Public service announcements should be developed that relate directly to fear of fat, binge eating, and weight preoccupation.

Our children are troubled by too much dieting, too much weight preoccupation and, in many cases, too much fat. We do not want to create another generation of dieters who, the harder they diet, the more troubled and ponderous they become. It is critical that more private and public sector support and attention be devoted to the prevention and treatment of weight and eating problems in our young people.

Chairman MILLER. Thank you.

Dr. YAGER. We need you to pull the black microphone, the other one is for the reporter. It is the larger one. The black microphone is more important.

Thank you.

STATEMENT OF JOEL YAGER, M.D., MEDICAL DIRECTOR, ADULT EATING DISORDERS CLINIC; PROFESSOR OF PSYCHIATRY, NEUROPSYCHIATRIC INSTITUTE AND HOSPITAL, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CA

Dr. YAGER. Thank you for this opportunity to talk about eating disorders among today's youth.

I will talk about causes, effects on the family and programs for the prevention and treatment.

Anorexia nervosa, the syndrome of intentional starvation, seems to be about two to four times as common today as it was only two to three decades ago. We need better data.

Bulimia nervosa, the syndrome of binge eating and purging, was first described less than twenty years ago and seems to be everywhere.

Conservative estimates suggest that between one and five percent of high school and college women, particularly among middle and upper class middle social groups, have clinically significant eating disorders.

In a survey we recently conducted of 700 UCLA female students, we found that about five percent had experienced a clinically significant eating disorder at some point in their lives and about two percent had an active disorder at the time that we conducted the survey.

Among the women who were coming into the student health program, the general medical clinic, not for psychological problems, ten percent reported that they did or previously had an eating disorder at some point in their lives.

Moreover, in every group of the students that we examined, sororities, athletic teams, dance majors, undergraduate classes, we found that specific symptoms of eating disorders had been experienced by usually twenty to thirty percent or as many as forty percent of the women that we surveyed.

In contrast, among 300 male students, only two had ever had an eating disorder.

Causes. The recent increase in the rates of eating disorders seem related to the marked pressures for slimness in today's society among females. Studies have shown that in the past two decades, American ideals of beauty as judged by the vital statistics on Miss America Beauty Contest winners and Playboy centerfolds show that the women have become slimmer for their height, on the average of about ten pounds.

American ballet dancers have also become slimmer over the years, slimmer than their European counterparts. These trends parallel a string of fashionably thin First Ladies and influential womens' magazine editors, starting in the Kennedy years and going right through to the present, and they stand in marked contrast to the buxom movie stars and models and First Ladies of the

1950s, who were like Jane Russell or Marilyn Monroe, Bess Truman and Mamie Eisenhower.

Women's fashions have accentuated these trends with slim line designer jeans which are meant to accentuate the space between the thighs, spandex pants and skimpy swimsuits.

Many surveys have shown that the majority of normal women of the community are unhappy with their bodies, most feeling overweight, particularly in their thighs and buttocks, paradoxically the most difficult places from which to lose weight.

Among our UCLA female students, the average weight was about ninety-five percent of that recommended for their height using the 1983 Metropolitan Life Insurance tables. They desired to weigh eighty-seven percent of what was recommended.

In contrast, the men weighed ninety-nine percent of what was recommended, but desired to weigh a hundred and one percent. So, you really have a tremendous difference in what people weigh and what they desire to weigh, and that is very culturally influenced.

But, now given the huge extent of weight preoccupation and the wide prevalence of some symptoms of eating disorders, only a small percentage of women develop the serious disorders. Still, they do constitute a large number of American adolescents and young women.

Who breaks down? The question is given that although everybody has all of these pressures, why do only some people break down?

It is likely that those women who are most vulnerable to emotional breakdown are those who suffer from low self-esteem, depression, timid and anxious personalities, alcohol and drug abuse. That is, if you have other kinds of emotional problems in the individual or in the family, those children are most likely in these days with the current social pressures to experience an eating disorder.

There may be biological contributions to eating disorders, but we really need more research to know for sure. It is not clear.

Addiction models of disease, which may be useful for alcoholism, do not seem appropriate or correct for the eating disorders. These are not simple addictions to food and they are not simple addictions to starvation.

There is definitely family transmission. Eating disorders cluster in families among mothers and daughters with afflicted sisters often seen. Bulimia seems to occur more commonly in families where relatives also have depression and alcoholism.

Indeed, the majority of women with bulimia and many with anorexia nervosa also have, along with their eating disorder, major depression with suicidal tendencies or other psychiatric problems, such as personality disorders or substance abuse problems.

In the study we conducted of 628 women who responded to questionnaires through Glamour Magazine, and followed over twenty months, about sixty-five percent rated themselves as always or often depressed, about thirty percent had tried to intentionally harm themselves, had some suicidal behavior, about sixty percent had serious personality problems, and about twenty percent had some substance abuse problems at the same time.

To sum up, families with emotional problems breed children with emotional problems, and today many of these young females develop eating disorders along with all of the other kinds of emotional problems.

Effects on the family. Since these are chronic disorders with forty to sixty percent chronicity for anorexia nervosa and a high death rate due to suicide and malnutrition, the burden on the family is considerable.

Other negative health consequences include osteoporosis and impaired reproduction. Health care costs for families are considerable due to the frequent need for hospitalization and out-patient treatment, often in the face of inadequate health insurance coverage and very few public treatment facilities.

Whereas daughters with these illnesses could cause major problems for the best of families and do, since many of the families also have other kinds of emotional problems this only makes things worse, so that what you have is a child getting sick and further hurting a family that already may have some of its own emotional problems, marital strife, and the whole thing snowballs.

Intervention strategies. Prevention, first. Health education through popular media and school programs should be targeted to all age groups, starting with elementary school, where the attitudes about beauty are formed. Values clarification classes in schools should discuss children's sources of self-esteem and turn concern for slimness to concern for fitness.

We do not want slim kids, we want healthy kids. Basically, the idea, "you cannot be too rich or too thin" should be replaced by "you cannot be too rich, but you can be too thin."

The popular media and fashion industries should also value health rather than slimness. Bearing in mind our top concern about obesity, the word should go out that it is not too good to be too heavy or too slim, that each carries bad health risks.

The health dangers of starvation, vomiting, laxative abuse, and excessive compulsive exercise along with obesity should all be made widely known.

Schools can help by providing courses for students and even for their parents on human relations, showing how families can communicate more adequately with one another, so that maybe people can solve their problems in ways other than taking them out by hurting themselves.

Treatment programs. Intervention programs have to look at all of the biological, psychological and social causes and manifestations and effects of the eating disorders. They should include psychological and nutritional counseling for individual and groups and these can be made available through public school health programs and through student health programs on college campuses.

Self-help and mutual support groups can also be helpful if they are sensibly guided and not based on zealous ideologies. Because hospitalization is often needed and often prolonged, especially for anorexia nervosa, health insurance coverage for these conditions, properly peer reviewed, should be strengthened and these conditions along with all other mental disorders should be covered by catastrophic health insurance. That is not currently the case, and I know many, many families who have been totally wiped out, having to pay for the cost of health care.

Finally, there is a major need for research funding to help us better understand the complex causes and to help us develop better treatments.

Thank you.

[Prepared statement of Joel Yager, M.D., follows:]

PREPARED STATEMENT OF JOEL YAGER, M.D., PROFESSOR OF PSYCHIATRY, DIRECTOR, ADULT OUTPATIENT EATING DISORDERS PROGRAM, SAN FRANCISCO, CA

The following will provide a brief overview of the causes of eating disorders, an assessment of the impact of these disorders on the family, and proposals for prevention and intervention to reduce the prevalence and severity of these problems in our society.

Eating disorders appear to be increasing both in case detection and in absolute prevalence. The best estimates suggest that anorexia nervosa is two to four times as common as it was several decades ago, and bulimia nervosa, a syndrome first described within the last several decades, also appears to be quite prevalent among women of high school and college age, and women into their twenties and older.

Conservative estimates suggest that between 1 and 5 percent of high school and college women, particularly among the middle and upper middle class social groups, have eating disorders of clinical significance, i.e., of concern to health care professionals. Bulimia Nervosa, a syndrome of binge eating and purging occurring mostly in women of more or less normal weight, appears to be several times more common than anorexia nervosa, a syndrome in which self starvation and marked weight loss are prominent. A much higher percentage of young women, perhaps 10 to 20 percent, have some eating disorders symptoms without having a full blown clinically severe problem.

I. CAUSES

The causes of eating disorders are complex, and include social, psychological and biological aspects.

Although cases of anorexia nervosa and bulimia have appeared in the medical literature for at least 100 years, and probably earlier than that, the recent increase in prevalence of these disorders seems best explained by changing social forces. Over the last several decades, for example, it has been documented that American, and indeed all Western European, societal ideals for the feminine body have become slimmer for height. It has been demonstrated that during this time period Miss America Beauty Pageant winners and women selected as Playboy centerfolds have become slimmer for their height, on the average of ten pounds. This has been paralleled by the appearance of extremely thin models in the most influential fashion magazines such as Vogue, Cosmopolitan, and Glamour. The popularity of models such as "Twiggy" highlights the value placed on extreme slimness. At the same time, over the past several decades American ballet dancers have also become slimmer, probably under the influence of George Balanchine, who for many years was the most persuasive value shaper in American ballet. In line with this, the prevalence of frank anorexia nervosa among professional ballet dancers has been shown to be very high, and is highest in the most competitive ballet companies, as high as 7 to 14 percent of dancers in some companies.

These trends, perhaps not coincidently, have occurred at the same time that the United States has had an unbroken stream of "fashionably" thin, if not gaunt, first ladies and influential women's magazine editors. In contrast to the 1950's buxom movie stars, models and first ladies, such as Marilyn Monroe, Jane Russell, Bess Truman and Mamie Eisenhower, the 1960's, '70's and '80's have featured much slimmer women.

Women's fashions have accentuated these forms as well, with skin-tight designer jeans, spandex pants and skimpy swimsuits, all pressuring women to develop thinner thighs and buttocks, paradoxically the most difficult places on a woman's body to lose weight.

Many surveys of normal women in the community have shown that the large majority are unhappy with their bodies. Most feel overweight, particularly in their thighs and buttocks. A survey conducted through Glamour Magazine to which 30 thousand women responded revealed that whereas the large majority of women fell within recommended weights, 75 percent felt fat and only about 20 percent said that they weren't ashamed of their bodies. Among several hundred UCLA undergraduates, we found that the women weighed 97% of recommended average weight for height but desired to weigh 87%, whereas the men weighed 99% of recommended weight for height and desired to weigh 101%. This clear sex difference in the ratio of desired weights in relation to recommended and actual weights constitutes, in my view, a measure of the pressures that force the appearance of eating disorders in vulnerable individuals.

However, societal pressures alone cannot explain why only a small percentage of those subjected to these influences develop the eating disorders. It is probable that these pressures have their most pervasive influence on those who are most vulnerable to emotional breakdown. In our culture, many women prone to emotional breakdown are likely to have their symptoms channeled into the direction of eating disorders.

Vulnerable adolescent women include those with low self-esteem, those who value themselves only for external achievements or visible characteristics valued by others, such as physical appearance, and those with a tendency toward depression, alcohol and drug abuse and impulsive-behaviors—broadly speaking those with "weak personalities" or "weak egos". For individuals who have no better methods of coping or tension reduction, excessive and pleaureless compulsive exercise, compulsive dieting to the point of self-harm, compulsive binge eating when the body rebels against starvation, and compulsive vomiting and laxative abuse are common expressions of maladaptive coping.

At the present time, it is unclear as to what sorts of biological vulnerabilities may be present in those prone to eating disorders. It is conceivable, for example, that brain and hormone differences exist among women who will and who won't get eating disorders, so that those women whose menses tend to become irregular or stop in response to stress or strenuous exercise may be more prone to develop eating disorders. Some eating disorders syndromes may be related to starting, or stopping, birth control pills, suggesting a biological mechanism. Also, if one identical twin has anorexia nervosa, the co-twin is much more likely to also have anorexia nervosa than is a sister who isn't a twin.

There is clearly some family transmission of eating disorders. The rate of anorexia nervosa, and probably of bulimia, is higher among the mothers and sisters of eating disorders patients than in the general population. Current studies also suggest that bulimia nervosa is much more likely to develop in daughters from families in which parents have other emotional problems, such as depression and alcohol abuse.

To sum up, emotional troubled families breed children and adolescents with emotional problems, and in our society eating disorders are common manifestations of emotional problems among young women. To underscore this point, the majority of patients with bulimia nervosa also have major depression (not infrequently accompanied by some suicidal tendencies) and other psychiatric problems such as personality disorders, anxiety syndromes and/or substance abuse disorders. This concurrence suggests that the eating disorders are but one manifestation of broader emotional problems of adolescence and young adulthood in women. Of course, it is hard sometimes to tell which is the chicken and which is the egg, for example, whether the eating disorder produces a depression, or depression produces an eating disorder, or some interaction of the two.

II. How these illnesses affect the whole family.

Even for the best of families, emotional problems in adolescents can be devastating. Particularly with the thinner anorexic and severely bulimic patient, the negative impact and burden on the family is considerable. These patients are ordinarily very depressed, often suicidal and frequently socially nonfunctional, incapable of employment or attending school.

The burden is often long term, since in 60-70% of patients, anorexia nervosa is chronic, and since 10-20% of patients may die of suicide or malnutrition within 20-30 years after the condition starts. Other long term negative health consequences are osteoporosis and impaired reproduction. The health care costs are often considerable, since repeated and sometimes prolonged hospitalizations are often the case, frequently in families without adequate health insurance coverage for these problems. If severely malnourished and obstinately refusing to eat, to their parents these patients may seem to be willfully starving themselves to death, and willfully inflicting great emotional pain and suffering on their parents, siblings and other members of the family. In such circumstances even the most well balanced and otherwise well functional family will become markedly distressed and disrupted. And since the evidence suggest that many of these families have a greater burden of emotional problems to start with, the disruptions super-imposed by the eating disordered adolescent are even more considerable and often amplify the families' other problems.

Typical family problems seen in eating disorders patients include an overinvolved "neurotic" mother who herself suffers from low self-esteem and depression, and an aloof, uninvolved father who may be alcoholic. In some cases one or both parents may be excessively, unremittingly critical toward the patient, a family pattern that has been shown to correlate with poor prognosis.

III. Intervention Strategies.

Interventions for the eating disorders can and should include both prevention programs as well as clinical intervention programs for the disorders once they are present.

A. Prevention

With regard to prevention strategies, health education can be profitably aimed at the public at large through the popular media and through school programs. Basically, the idea "you can't be too rich or too thin" should be replaced by the idea "you can't be too rich, but you can be too thin". With respect to popular media, value should be placed on health and true fitness rather than on slimness. Since women biologically require a certain amount of body fat if they are to menstruate and bear children in a normal fashion, fat does not mean unfit. The appropriate concern about obesity that has been voiced by public officials should be balanced: the word should go out that it is not good to be too heavy or too slim, that each extreme carries its own particular bad health risks.

Private industry, particularly those who order and those who produce advertisements involving womens' fashions and beauty aids should understand the desirability of portraying the wide range of normal feminine attractiveness and beauty, including medium and large framed women, and including women whose hips and thighs are heavier than those currently displayed in Vogue. The meatier bathing beauties and pin-ups of the 1930's, 40's and 50's showed that heavier "ideal" women could still sell products.

The same message can be broadcasted widely through school education programs, starting in elementary and junior high schools, when girls start to develop their values about appearance. Value clarification classes for youngsters with respect to the sources of their self-esteem, and family-wide discussions through parents association groups can all help in turning the public's concern from slimness to health and fitness.

The health dangers of starvation, vomiting, laxative abuse and excessive compulsive exercise should all be made widely known.

Schools can also help by providing courses for students, and perhaps for their parents as well, on human relations, focusing on communication skills within the family. Such laboratories could provide sites in which parents who are having difficulties communicating with their adolescent children, and perhaps with one another as well, might improve these skills and reduce the general burden of all the major adolescent psychosocial problems which include not only eating disorders, but also serious depression, suicide, substance abuse, and unwanted teenage pregnancy.

B. Clinical Interventions:

Intervention programs including psychological and nutritional counseling for individuals and groups can be made available through public school health programs and through student health programs on college campuses.

For those with severe disorders the problem of hospitalization is often a great burden, because psychiatric hospital benefits are often much skimpier than those for general medical problems, and since the lengths of stay required for the adequate treatment of severe eating disorders may be in the order of several months rather than the two or three weeks which may be all that is covered by some insurance policies. Therefore, the inclusion of severe psychiatric disorders including eating disorders with proper peer review safeguards, in provisions for catastrophic health coverage is essential .

Finally, in line with both prevention and clinical intervention, there is a major need for research funding. Only through research will we be able to understand the complex biological and psychological as well as social causes of these disorders, so that improved programs for prevention and treatment can be established.

Joel Yager, M.D.
Professor of Psychiatry
Director, Adult Outpatient Eating Disorders
Program

Chairman MILLER. Thank you. Dr. Fallon.

STATEMENT OF PATRICIA FALLON, PH.D., CLINICAL PSYCHOLOGIST, SEATTLE, WA

Dr. FALLON. I am going to speak today about some of the cultural factors in the development of eating disorders, and you will hear, I will be echoing some of the things that other people on the panel have been speaking about. I think they are very important and worth hearing about a couple of different times.

You cannot hear?

Chairman MILLER. That is the microphone you have to speak into.

Dr. FALLON. Okay. Can you hear now?

[Pause.]

Dr. FALLON. Okay. Eating disorders—can you hear it now?

Eating disorders and anorexia nervosa and bulimia nervosa have reached an alarmingly high rate of occurrence in western cultures. They appear to be on the increase and research has shown that ninety to ninety-five percent of those presenting with an eating disorder are female.

While these complex disorders are multi-determined and no single cause has been shown to produce anorexia or bulimia, a number of cultural factors have been shown to increase the likelihood of someone developing an eating disorder.

A number of researchers in the eating disorder field have described the relentless pursuit of thinness in western cultures and the drive for thinness seen in eating disorder patients.

Over the past twenty-five years, there has been a significant move towards a thinner ideal body image for women. Two groups of ideal women, Miss America contestants and Playboy bunnies, were studied to assess trends in weight and body measurements.

Chairman MILLER. Excuse me, if I might. Apparently we have an emergency call for Dr. Bolter, if he is in the room. Do we have a Dr. Bolter in the room?

A VOICE. No, but I am from that hospital.

Chairman MILLER. Thank you. Go ahead.

Dr. FALLON. There was a decrease in average measurements for bust and hips, although there was an increase in height. Miss America contestants showed a decrease in weight over the twenty year period and it was found that for sixteen of the twenty year study, the winners weighed significantly less than the average of the contestants.

So, there is a pay-off for being thinner. This study is particularly concerning in light of the fact that the average body weight of the American woman under the age of thirty has increased, probably due to better nutrition. Attractiveness, thinness and success are equated in our culture as exemplified by these studies.

Dieting has become a national pasttime for American women. The number of diet-related articles published yearly has doubled between 1959 and 1979. Seventy-seven percent of college females diet. Sixty-three percent of high school females want to lose weight, and, by contrast, high school males want to gain weight, and four out of five fourth grade girls have dieted.

Strict dieting has both physiological and psychological consequences, which lead to binge eating and weight gain. Studies have documented dieting behavior as directly preceding the onset of an eating disorder.

Exercise has been frequently promoted as a way to control weight or decrease body fat to unrealistic and unhealthy levels, rather than as a way to feel stronger, more powerful or better about one's self. In a study in a woman's magazine, ninety-five percent of female respondents had used exercise as a means of weight control.

Unrealistic sex role expectations for women may also be related to the development of eating disorders. The super woman syndrome, which suggests that women can have it all if they just work hard enough, has been a concept that has been recently widely presented in the media. Career achievement, perfection as a wife and a mother, and physical attractiveness are part of the pressures in the super woman model.

A study by Katherine Steiner, which investigated the relationship between disordered eating and uncritical acceptance of a super woman ideal, involved interviewing a group of adolescent females who were asked to describe the ideal woman. These girls were also asked to describe their own personal expectations and then these two responses were compared, their scores, on an instrument that measures disordered eating.

All of the adolescents, the whole group, described the super woman model as the ideal woman. However, those who described their personal expectations and goals as similar to the super woman ideal had elevated scores on the measure of disordered eating. Those girls who had more realistic personal expectations were significantly more likely to have scores in the non-eating disordered range.

Thus, it appears that uncritical acceptance of the super woman as an ideal that can be achieved may increase the female's vulnerability to developing an eating disorder.

A new area of research in the eating disorder field has concerned the relationship between sexual and physical abuse and the development of eating disorders. While there are conflicting results, perhaps due in part to methodology and definition of abuse, a number of studies have shown an alarmingly high rate of physical victimization in eating disordered patients. A study by Oppenheimer found that two-thirds of the sample of eating disordered patients had a past history of sexual abuse.

A study by Kearney-Cook showed a rate of 58.7 percent of bulimic patients had been sexually abused, and a history of sexual or physical abuse was found in sixty-six percent of bulimic women in the study by Root and Fallon.

It is not suggested that sexual or physical abuse causes a woman to develop eating disorders, but it may be an important contributing factor, particularly when coupled with an environment that stresses thinness as desirable or thinness as a way to feel in control.

Eating disorders may be a way in which the woman can express her feelings of anger over her body being violated in a way that does not endanger her physically. The body is the place that the abuse occurred and feelings of self-hatred and anger may become directed at her body. A woman who has been abused learns to numb her feelings and a lack of recognition and expression of feeling is a hallmark feature in patients presenting with eating disorders.

She may respond to a loss of control over her body by desperately attempting to control her weight and eating in a culture that supports and profits by this type of control. However, not all women in our culture develop eating disorders, although many, many are preoccupied with dieting.

Other social environments, such as families, schools and careers, may either reinforce these destructive cultural messages or help women to challenge them. Certain appearance-related occupations, such as modeling, may promote unrealistic standards and thus increase the probability of developing anorexia nervosa or bulimia nervosa.

Certain environments, such as a college dormitory, if there is an emphasis on thinness, may also be breeding grounds for eating disorders.

The family is in a unique position of having a major impact on the acceptance or rejection of these unrealistic standards and expectations. Families in which there is a strong emphasis on dieting and thinness as a measure of self-esteem and self-control may be more at risk for having a member with an eating disorder.

If self-worth is defined solely by externally-based criteria, such as academic achievement, money earned, and appearance, members are more likely to define themselves as good or bad, based on external criteria which are subject to change rather than on developing a more stable sense of self-esteem.

Families in which females are physically, sexually, or emotionally abused may also have an increased incidence of eating disorders, particularly if this abuse is coupled with an emphasis on appearance.

Mothers in eating disordered families have often been characterized as over-protective. Although the rates of victimization of mothers has not been studied empirically, clinical observations have noted that these mothers frequently have been victims of abuse and may be striving to protect their daughters in a way that they were not protected as they were growing up.

The cultural factors operating in the development of eating disorders in families is overwhelming. We need to present young women with more realistic role models, continue programs to detect and prevent abuse, and support the development of identities that are not dependent on weight and appearance. Education on the negative effects of dieting and the relationship to the development of eating disorders can be provided in schools and to families.

Efforts in educating women and families is imperative if we are to effect a decrease in these tragic preventable disorders.

[Prepared statement of Patricia Fallon, Ph.D. follows:]

PREPARED STATEMENT OF PATRICIA FALLON, PH.D., CLINICAL PATHOLOGIST, SEATTLE, WA

Eating disorders, anorexia nervosa and bulimia nervosa, have reached an alarmingly high rate of occurrence in women in Western cultures. They appear be to on the increase and research has shown that 90 to 95% of those presenting with an eating disorder are female (Pyle, Mitchell, & Eckert, 1981). While these complex disorders are multi-determined and no single cause has been shown to produce anorexia or bulimia, both a number of cultural factors have been shown to increase the liklihood of someone developing an eating disorder.

A number of researchers in the eating disorders field have described "the relentless pursuit of thinness" in Western culture and the "drive for thinness" seen in eating disordered patients (Bruch, 1978; Garfinkel & Garner, 1982). Over the past 25 years, there has been a significant move towards a thinner ideal body image for women. Two groups of "ideal" women, Miss America contestants and Playboy Bunnies, were studied to assess trends in weight and body measurements (Garner, Garfinkel, Schwartz & Thompson, 1980). There was a decrease in average measurements for bust and hips, although there was an increase in height. Miss America contestants showed a decrease in weight for the 20 year period and it was found that for 16 of the 20 years studied, the winners weighed less than the contestants. This study is particularly concerning in light of the fact that the average body weight of the American woman under the age of 30 has increased, probably due to better nutrition. Attractiveness, thinness, and success are equated in our culture as exemplified by these two studies.

Dieting has become a national pasttime for American women as evidenced by a study which found that the number of diet-related articles published yearly has doubled between 1959 and 1979 (Garner et al., 1980). Seventy-seven percent of college females diet (Jakobovits, Halstead, Kelley, Roe, & Young, 1977), 63% of high school females want to lose weight (by contrast males wanted to gain weight) (Huenemann, Shapiro, Hampton, & Mitchell, 1966) and 4 out of 5 fourth grade girls have dieted. Strict dieting has both physiological and psychological consequences which lead to binge-eating and weight gain. Studies have documented dieting behavior as directly preceding the onset of an eating disorder (Bruch, 1973; Pyle, et al., 1981).

Exercise has frequently been promoted as a way to control weight or decrease body fat to unrealistic and unhealthy levels, rather than as a way to feel stronger, more powerful, or better about oneself. In a study in a woman's magazine, 95% of respondents had used exercise as a means of weight control (Wooley & Wooley, 1984).

Unrealistic sex roles expectations for women may also be related to the development of eating disorders. The "superwoman syndrome" which suggests that women can "have it all" if they simply work hard enough, has been a concept that has recently been presented widely in the media. Career achievement, perfection as a wife and mother, and physical attractiveness are part of the pressures in the superwoman model. A study by Steiner-Adair (1986) which investigated the relationship between disordered eating and the uncritical acceptance of the superwoman ideal involved interviewing a group of adolescent females who were asked to describe the ideal woman. The girls were also asked to describe their own personal expectations and these two responses were compared to their scores on an instrument that measures disordered eating. All of the adolescents described the "superwoman" model as the ideal woman. However, those who described their personal expectations as similiar to the superwoman ideal had elevated scores on the measure of disordered eating. Those girls who had more realistic personal expectations were significantly more likely to have scores in the non-eating disordered range. Thus it appears that uncritical acceptance of the superwoman as an ideal to be achieved may increase a female's vulnerability to developing an eating disorder.

A new area of research in the eating disorders field has concerned the relationship between sexual and physical abuse and eating disorders. While there are conflicting results, perhaps due in part to methodology and definition of abuse, a number of studies have shown an alarmingly high rate of physical victimization in eating disordered patients. A study by Oppenheimer (1983) found that two-thirds of a sample of eating disordered patient had a past history of sexual abuse. A study by Kearney-Cooke (in press) showed a rate of 58.7% of bulimic patients had been sexually abused and a history of physical or sexual abuse was found in 66% of bulimic women in a study by Root and Fallon (in press). It is not suggested that sexual or physical abuse cause a woman to develop an eating disorder, but it may be an important contributing factor, particularly when coupled with an environment which stresses thinness as desireable. Eating disorders may be a way in which the woman can express her feelings of anger over her body being violated in a way that does not endanger her physically. The body is the place that the abuse occurred and feelings of self hatred and anger may become directed at her body (Root, Fallon, & Friedrich, 1986). A woman who has been abused learns to numb her feelings and a lack of recognition and expression of feeling is a hallmark feature in patients presenting with eating disorders. She may respond to a loss of control over her body by desperately attempting to control her weight and eating in a culture that supports and profits by this type of control.

However, not all women in our culture develop eating disorders, although many are preoccupied with dieting. Other social evironments, such as families, schools, and careers, may either reinforce these destructive cultural messages or challenge them. Certain appearance-related occupations such as modeling may promote unrealistic standards and thus increase the probability of developing anorexia or bulimia. Certain environments such as a college dorm or sororities, if there is an emphasis on thinness, may also be breeding grounds for eating disorders.

The family is in a unique position of having a major impact on the acceptance or rejection of these unrealistic standards and expectations. Families in which there is a strong emphasis on dieting and thinness as a measure of self esteem may be more at risk for having a member with an eating disorder. If self worth is defined solely by externally based criteria such as academic achievement, money, and appearance, members are more likely to define themselves as "good" or "bad" based on external criteria which are subject to change rather than developing a more stable self esteem. Families in which females are physically, sexually, or emotionally abused may also have an increased incidence of eating disorders, particularly if this abuse is coupled with an emphasis on appearance. Mothers in eating disordered families have been characterized as overprotective. Althought the rates of victimization of the mothers has not been studied, clinical obsevations have noted that these mothers frequently have been victims of abuse and are striving to protect their daughters in a way in which they were not (Fallon & Root, 1986; Root, et al., 1986).

The cultural factors operating in the development of eating disorders in families is overwhelming. We need to present young women with realistic role models, continue programs to detect and prevent abuse, and support development of identities that are not dependent on weight and appearance. Education on the negative effects of dieting and the relationship to the development of eating disorders can be provided in schools and to families. Efforts in educating women and families is imperative if we are to effect a decrease in these tragic, preventable disorders.

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Chairman MILLER. Thank you. Thank you very much.

We thank all of you for your testimony and your contributions this morning.

Krista, if I might just ask you, when you look back, what do you notice may be the biggest changes in how you view yourself now as opposed to at the onset of the anorexia or even before then?

Ms. BROWN. Now, I feel like I have an inner-self, like I mentioned in my paper; that is, worth taking care of. Before, I was more one to take care of everybody else, always feeling that everybody else deserved a little bit more than I did, but now I feel like I deserve something, too, because I have worked hard. That is how I feel.

Chairman MILLER. So, before, you might have been the prime producer in the family. You were——

Ms. BROWN. Very much.

Chairman MILLER [continuing]. Going to put it all together?

Ms. BROWN. Right. And take care of everybody and feed everybody.

Chairman MILLER. Was that evident in the family, Susan?

Mrs. BROWN. Yes. She is always taking care of everybody. I had her when I was very young, and, so, it was kind of a situation where she helped raise me a little bit, too. So, yes, that was very, very obvious in the family and in our situation.

Chairman MILLER. You were nice enough to share with us the idea that Krista's disease caused a lot of chaos in your family and caused you to confront a lot of obstacles that were there.

Again, when you look back, prior to the finishing of the current treatment, how is it different?

Mrs. BROWN. What it did for me is it made me face a lot of things that I never had the courage to face before, and with her disease, it just made me have to make some decisions in my life and change some things that were not okay with me and it made me face that. It took a lot of courage, and, so, she was also working hard to change our whole lives, but in a good way. It was very hurtful, it was very painful, and I would be lying if I did not say it left a lot of scars, just like I said, but it was a very positive thing for myself and Krista would speak for herself.

But as far as I am concerned, I have grown from it. I have learned so much about myself. I do not put my head in the sand anymore. I face things and take things on. We are both more direct with each other and with other people and we both needed to be that way.

Chairman MILLER. Okay. Krista, you are in school now?

Ms. BROWN. Yes.

Mrs. BROWN. You are a senior.

Chairman MILLER. You are a senior. You will be a senior in September?

Ms. BROWN. I will be a senior in September.

Chairman MILLER. Again, given your experiences, what do you now think you know about your friends in terms of what you heard a lot of discussion this morning about how prevalent eating disorders may be among young women? Are you aware of that with your friends from high school?

Ms. BROWN. Very much, very much. Everybody is really—it really seems unnecessary to me how they felt about their bodies, but to them, they have not been through, you know, the experiences that I have dealt with. A really bad disease that can kill you.

So, they are really ignorant to the fact that—I try to make them see without, you know, trying to be a doctor about it or anything, but I try to explain to them before they get themselves into something that you think you have control over but you really do not. So, I try to help that way.

Chairman MILLER. What do you think about or how do the discussions that we know take place and assume take place with young girls about dieting, clothing, modeling, public figures that you hold up to some ideal, how do you interact with those conversations now, when they take place with young girls? You go through fashion magazines or——

Ms. BROWN. Basically, I just speak what is on my mind and say that girl is too thin, you know. Most of my friends agree with me because I try to surround myself with people who are realistic and do not live in a fantasy world, that you can be fifty pounds and survive, you know, and it is just not real. And most—I try to surround myself with happy people, people who believe that their life has to be like a magazine are not very happy, you know.

Chairman MILLER. Do you have any comments Preston?

Ms. PARSONS. Let me see. I think one of the things that keeps coming up in my treatment as well as what we have heard today is the extent to which women have, in fact, and men, too, have been brainwashed by the media and by the pursuit of thinness and that a lot of work that Krista has done and other people need to do is almost to be de-brainwashed and re-educated about what is normal, feminine body shape.

It is frightening when you see a twelve or thirteen year old come in who has just begun to develop and has interpreted natural development as fat rather than seeing it as being okay and safe and welcoming the development of their body. It is very difficult to combat all the media, all the pressures, and I would say that, particularly in this culture, we have begun to normalize disordered eating and disordered thinking about body image for women. It is very pervasive.

While some women fall into the category of having a severe eating disorder, most of the women I have known have had some experience or struggle with low self-esteem plus a poor body image and distorted eating. It is very wide-spread.

Chairman MILLER. Thank you.

Dr. Yager, there is—I think there is some notion in the lay community, if you will, that this is a temporary phenomenon that a young person will go through and it can be cured and may require intensive treatment as the Mt. Diablo program, and as Krista and her mother have described.

You suggest in your testimony there are long-term consequences. Now, how is this arrived at?

Dr. YAGER. Well, I think there is data to show that there is a tremendous amount of chronicity with eating disorders. Some researchers have shown that the earlier you have a eating disorder (and Krista developed hers at thirteen) the better you do; that is, it is an early developmental thing and kids who get it earlier may pull out and do better, whereas those who develop it later on, at seventeen, eighteen, nineteen and their twenties, have a much tougher time pulling out. One study that came out of Sweden suggests that twenty percent of women with anorexia nervosa can be dead within twenty to thirty years from suicide, malnutrition, things of that sort.

Even people who regain their weight may not have psychological health. There is a tremendous amount of remaining depression, weight preoccupation, personality problems, and relationship problems in a lot of people with eating disorders.

There are probably people who dip in and out, who have an active phase during a time of stress in their life, may become very weight-preoccupied and start to diet down again, ease up, get better, but a number of years down the road when things start to go sour in their lives again they fall into another episode.

Chairman **Miller**. So, it can be episodic?

Dr. **Yager**. So that you can have a chronic—that is right. You can have chronic and recurrent episodes of eating disorders.

Chairman **Miller**. That is why Krista is telling us that it is not a question of being cured; it is a question of monitoring and an awareness.

You are talking about the possibility, in the study, of something like twenty percent of people may die of suicide or malnutrition twenty to thirty years down the road, and we are talking about several million people being involved at one level or another. You are talking about a lot of people.

Dr. **Yager**. Yes. Potentially, yes.

Chairman **Miller**. Potentially. I do not want to draw a conclusion. I am just saying the notion that this is something where you can end up weighing what you weighed in——

Ms. **Brown**. Seventy-eight.

Chairman **Miller**. Seventy-eight pounds, but you can pull yourself out of it.

Dr. **Yager**. It is not simply an attack of mononucleosis that a kid gets over. That is absolutely true. I mean, for people who wind up in hospitals and then have to work their life through an eating disorder, I think you have a certain burden of risk that is going to stay with you.

Chairman **Miller**. Well, let me ask you a question. A number of people touched on it, but you included it in your testimony. The notion that we have a chaotic family here and Krista talks about the desire to produce, to feed everybody.

Is the anorexic child working within this chaotic framework to set it straight? I mean, is that part of what is going on or is she working within an ideal framework and she just wants to be more ideal? What is——

Ms. **Mellin**. Well, I think, in general, even though we are presenting basic concepts here today, eating disorders, whether it is obesity, anorexia or bulimia, are extremely diverse, not only in terms of biological but social and psychological issues, also with respect to the family system.

We see often that there is an enmeshed family, and that means that they are just overly close, in eating disorders. Also, disengaged, sometimes chaotic, sometimes overlyrigid.

There is one study out of New Mexico that shows that among children of engineers, and one parent in New Mexico, the prevalence of eating disorders was twenty-five percent. So, rigidity may play a part, too.

So, various ways of looking at the family that is, in fact, dysfunctional——

Chairman MILLER. They do not do well in law school either.

Ms. MELLIN. Let me give you an example of the obese child. If your child were obese, you would notice all of a sudden they are a little bit chubby and you respond by having desserts a little bit less frequently and maybe sign them up for soccer class and that obesity may, in fact, resolve.

The family that is not adapted, not communicating well, not providing the real good supportive environment, may not pick up that response to it and solve the problem early on. Almost any kind of family dysfunctions even though anorexia is more apt to have enmeshment and sometimes chaos, can exacerbate or contribute to weight problems.

Chairman MILLER. And, Dr. Fallon, your description of the media, and let me broaden that term to say the general circulation of information and images in our society, you are talking about a society that is really obsessed with this notion. I mean, the conversations, the discussions, the purchases, the presentations really are overwhelming. You may see it on the morning news shows, the discussion of the number of diet books or exercise books or the Jane Fonda Work-Out Paper or periodicals that are spin-offs from something like People Magazine, I mean, where there is this incredible focus on this whole notion of achieving some element of that perfect being, not just in body, but in lifestyle.

I assume that comes from a wide range of reasons, but what do you put your thumb on? I mean—Congress cannot handle too many inputs what is causing this?

Dr. FALLON. Well, it is advantageous to the diet industry.

Chairman MILLER. You mentioned that you can profit by this.

Dr. FALLON. The diet industry is a $5 billion-a-year industry. $200 million are spent alone in over-the-counter diet drugs. In 1985, a diet book was on the best seller list every week for the entire year, and dieting, I think, several people have mentioned that, leads to binge eating and, so, that there is this yo-yo effect that goes on.

People go to weight loss clinics or centers, they go through diets, they spend lots of money on it, they may lose some weight, they regain it, they go back. I mean, it is a repeat business. It is very profitable, and, so, that I think that it may get down to economics.

It may get down to economics and I think it is also interesting that it is women who are mainly affected and I think part of that has been that beauty, whether that is Marilyn Monroe or Twiggy, has been a lot of the way that women have been evaluated over the years.

I want to make just one more comment about this not solely being a teen-age disorder, that while I quoted the study that four out of five fourth grade girls were dieting, which is a horrendous figure, there is also a study that looked at people over the age of sixty-two. Not an eating disorder study, but had them list their concerns, and for women over the age of sixty-two to ninety-five, I believe, weight gain was the second most biggest concern that they had after loss of memory.

For men after the age of sixty-two, weight gain was not in the top ten things that they rated. So, we are looking at something that goes over the life span, that people that we are seeing now are the daughters of weight preoccupied society and in a few years, we are going to be seeing the daughters of bulimics and anorexics and so, I think this is something that is going to go on and on and on. And perhaps exercise has become the next big profit-maker.

Chairman MILLER. There was a discussion in the Wall Street Journal yesterday about the company that sells the stuff that keeps you from becoming gray, what is it, Grecian Formula, and—how the hell would I know? But they mentioned the fact that—what we call the yuppie generation, which is not a very descriptive term, but anyway those people that are pushing forty, that they are not going to go quietly because they have been so indoctrinated with the notion of health clubs, of the flat stomach, of the dark hair, that this generation is not going to go over that threshold. Again, the discussion was about industries that are now making decisions about how they are going to help this generation maintain a little bit longer.

So, you are suggesting that it has the potential to compound itself.

Dr. FALLON. The potential to compound itself and it being profitable, and then you also have to look at what happens to people as they get older. It may be biologically pre-determined and appropriate for people to gain weight as they get older. There is some evidence out for that.

Chairman MILLER. That seems so.

Dr. FALLON. That may be a protective factor against illness and disease and, so, if we are raising a weight-conscious generation, they are getting to their forties now, they are ripe for the picking with industries that are selling and really, I think, making people afraid to get old.

Again, part of what I was trying to stress is that I think some of the education—I do not really think that the education needs to be on educating people about eating disorders. I think that is how some people start their eating disorders, that they learn about it from well-meaning education programs. It needs to be about dieting and what happens, the cycle of dieting—how that compounds their eating and begins eating disorders. It also needs to be about learning to feel good from the inside out as Krista—I think you really captured that in terms of feeling good from the inside out instead of from the outside in.

Dr. YAGER. I think women talk diet the way men talk sports. It provides a very common theme and something they can talk about to a stranger on the bus. We need to change what themes are available for women to talk about other than diets. That is the first thing.

The second thing is we have to get out the message if you weigh ten pounds or fifteen pounds more than you should, enjoy it. You are not going to get sick from ten or fifteen pounds. You are going to get sick from thirty or forty or fifty pounds, but not from ten or fifteen pounds, and the majority of people who get into this binge-purge cycle are trying to lose five pounds or ten pounds and that has nothing at all to do with health; it has to do with fashion and glamour.

It is not health-related except if you are twenty percent or more over your recommended body weight. That is when you start to get into trouble. You have to be exercising, you have to be watching your diet, and if you are trying to take off that extra ten pounds, you are probably where God meant for you to be, and as you get older, as Pat mentioned, the statistics show that health and weight go up a little bit with age, not go down with age. That is, for the person who is forty and fifty and sixty, the expectation is that they probably will be healthier, using insurance company data now, this is published by the National Institute on Aging, if you start to put on about ten pounds a decade, if you do not have hypertension, if you do not have diabetes, and if you do not have any of the other cardio-vascular risk factors.

Ms. Mellin. Can I also add something to that? Thank you. And that is that I think this is really directly in the purview of the committee, beyond the aging population, but back to children.

With the increase——

Chairman Miller. Excuse me.

Mrs. Boxer. He is just thinking about how much fun we will have gaining ten pounds a decade.

Ms. Mellin. It is always good to think about the things that come out of these conferences.

With all the news about the, you now, recent analysis of national representative data that shows that there has been an over fifty percent increase in obesity in children and about thirty-nine percent in adolescents, I am very concerned about the reaction of commercial weight programs to this.

I have seen it in my own practice and in my own work, and it is clear across the country, and what that is is many high-cost weight programs that really know nothing about children's well-being, normal development, psychological aspects, family system aspects, that are enormously profitable, are more than willing to put your child or mine on 400 to 600 calories a day for $400 a month.

Okay. One parent——

Chairman Miller. With insurance?

Ms. Mellin. This is paid for out of their pockets.

Chairman Miller. Out of pocket.

Ms. Mellin. There is that extent of desperation. So, what parents are doing is saying there is such a fat phobia among parents, they do not want to have fat kids, that they respond to any deviation in weight, including puberty in girls, with horror, do not know what to do because their child is saying I am too fat and they do not—they are weight phobic, also, so they do not respond by saying no, actually you are normal, and giving reassurance, but they say well, maybe you should go on a diet, and then, of course, the diet produces a weight gain, the child is more withdrawn, stays home more, watches television, eats more, is less active, and then the child cannot fit into the right clothes and they get more and more unhappy and they are willing to go to a commercial weight program and put that child on a diet that can really drastically affect their growth and well-being and pay for it.

Chairman **MILLER**. And accomplish the opposite.

Ms. **MELLIN**. And accomplish the opposite. One parent in Mill Valley told me about a year ago that they did not want to send their child through your program, she is about 200 pounds, because a shakedown causes only a gradual weight loss and changes within the family and so on. I want a drastic weight loss program. We have to get this fat off. Took her to a nutrition program, $400 a month, 400 calories, in three months, she was down to 139 pounds. She went off the program, off the formula, and had gained fifteen pounds back the first week and had become an avid binge eater and continued to gain all the way back to where she had gone before.

So, this destructive pattern really abuses the person because of this whole industry, the commercial around the weight problem.

Dr. **YAGER**. We see a lot of patients at our clinic who start out their bulimia as what we now call the liquid diet victims. The liquid diet victims crash diet, lose a whole bunch of weight very quick. Then as soon as they start to try to eat normally without their liquid calorie stuff, they are binge eating and then purging because they immediately feel terrible about having over-done it, and they feel trapped; that is when the bulimia starts.

Dr. **FALLON**. I think also in terms of looking at the purpose of diet and exercise, some important statistics are the ninety-five percent of females that are using exercise as a means of weight control and seventy-six percent of women diet for cosmetic reasons, not for health reasons, and so, that the vast majority of people who are on diets are, as Joel was saying, because of five pounds, ten pounds, or because they feel fat and they look on TV and see Miss America, weighing eighty-three percent of normal body weight.

Chairman **MILLER**. Congressman Coats.

Mr. **COATS**. Krista and Susan, thanks for your testimony here this morning. I know that was a difficult thing for both of you, but it was very helpful to us to hear someone who has actually experienced the problem relate that, and I hope it is helpful for you. Sometimes saying it in public can be therapeutic, too. So, we hope it is as helpful for you as it was for us and I appreciate your testimony.

Krista, one thing I am curious about. You apparently made two trips to the Diablo Clinic. In the first time, you sort of implied that you faked your way through or somehow you complied with the terms of the program but it did not really provide the cure.

How were you able to do that? I mean, how did you get away with that?

Ms. **BROWN**. How did I get away with it?

Mr. **COATS**. How did they know that you were faking and, therefore, they should release you.

Ms. **BROWN**. Well, on the surface, I think I seemed like I was probably willing more than inside because deep, deep, many layers down, I was still really, really into not gaining weight. I mean, I was scared to death. I did not want to gain weight. I wanted just to stay the same, which is a joke, because you do not. You just keep going down.

And it took a lot of talking and deep inside I know that parts of me wanted to go home, that I had many devices at my use. I wanted to start school because it was starting, school, the school year, and all that, my activities, I was just pleading, pleading to let me start afresh. I do not want to have to go in, you know, a month later. So, that helped.

I do not know. I look to the six months where I had lost, you know, down to seventy-eight pounds, as probably the best thing that happened to me, even though it seems pretty grotesque, because it jolted me enough to realize, oh, my God, I can get down to seventy-eight pounds, because when I was seventy-eight pounds, I did not know I was because I did not weigh myself. I just kept going on and on and on, and that jolted me to say okay, this is deadly and you had better get better, and then I reached inside and said do you want to get better or do you not, and I said yeah.

Mr. Coats. So, the first time, you thought to satisfy your parents you are going to go through the motions, but you——

Ms. Brown. I had no choice.

Mr. Coats [continuing]. Really did not believe it inside.

Ms. Brown. I had no choice. The doctors said you go.

Mr. Coats. Then, you got scared to the point that you thought I have really got to get a hold of this.

Ms. Brown. Yeah, yeah. Exactly.

Ms. Preston. Maybe I can speak to that. When Krista was first discharged, school was coming up and she was really, was half trying to think that she could go out and do it on her own. She really needed to go out and prove to herself one way or the other.

Having someone in the hospital when they are very resistant and they are fighting with you is often times just not helpful and, so, it was more helpful to have her go out and experience her struggle with anorexia longer. When she came in the next time, she was really much more aware of what was happening to her and what she needed to do.

Mr. Coats. We have had a lot of testimony about this being a total family problem. Now, did counseling involve Susan and the rest of the family also?

Ms. Preston. Krista's family was involved in both family therapy as well as a family education and support group. I was working individually with Krista and also doing family therapy. Our program provides a lot of family intervention. I think also that continued after-care, after someone leaves the hospital program, is essential and vital, that recovery does not happen in four weeks in a program. There needs to be set up a very consistent and reliable after-care treatment plan. This is one of the things that because of family problems fell through after Krista was discharged. It was another lesson in the treatment of the family and of Krista of how vital the on-going care is for Krista, then and now.

So, the family has been very involved.

Mrs. Brown. Can I say something?

Mr. Coats. Sure.

Mrs. **Brown**. As far as the anorexia the first time that Krista was an in-patient, I did not know that—this is what is so hard for people to understand unless you experience it, I thought that she would go there and get cured and you do not.

I visualized that as a devil in her and she saw that we talked about this. It just is something that is happening. You do not just go and—what can I relate it to? What other disease? Well, with alcoholism also, it does not leave you, you learn to live with it, and that is what is so important.

I had had so many people come up and say, well, take her to McDonald's and force a bunch of hamburgers down her. That is not what it is about. It is a disease and it is there and it is an excessive disease, that it does not go away. It does not go away in your in-patient visit. You have to learn and really work hard. It is hard work. You have to learn to deal with it and fight it, and it is one of the most powerful.

I have an illness myself, and Krista's strength overshot mine by so much. I respect her a lot. My illness is also really powerful, but hers took so much more fight to fight and I do not think people realize that it does not just go away, and even now, as she is sitting here now, do not think that it is not going to come out. It does every day, and she is going to have to live with that.

Mr. **Coats**. I want to pursue that just one second. Maybe Dr. Yager, Dr. Fallon or Laurel can comment on that. I mean, is this something that the typical anorexic or bulimic patient is going to have to fight their entire life? Is it to the same intensity, the same degree? Can we, do we compare it to an alcoholic, that if they do not stay with Alcoholics Anonymous and basically deal with it on a day-by-day basis, they are going to relapse back into it?

Dr. **Yager**. I think it is clear that certainly with the acute episode, you do not get better within a couple of weeks. We have learned that at least one year and sometimes two years of treatment as an out-patient following in-patient program is really necessary to consolidate the gains that are made during that period of time.

And, again, I think people have their periods of vulnerability. There are times when they are going to be weaker and stronger. That is not to say that you are going to have to be in therapy for the rest of your life. I do not think that that is the case. I know we have lots of patients who have been treated for awhile, get better, and then, depending on how they see their own needs and how their lives are going, they may come back and get into therapy when it is needed. So, it is not something that you have to do your whole life.

I do not see people who have had a good recovery from anorexia nervosa having to go to something like an AA meeting every week for the rest of their lives. That model does not apply.

But, again, there is a vulnerability and people who get better and get worse and may have to have repeated episodes of treatments.

Dr. **Fallon**. That would be somewhat similar to how I would view that. I think that there are some people who struggle with the anorexia and bulimia who do struggle with it, even though their symptoms may be under control or not evident throughout the course of their lifetime.

I also think, though, that there are people with anorexia and bulimia who have been in-patient and/or out-patient who totally recover from the disorder, who do not spend the rest of their lives preoccupied with food, who do not spend the rest of their lives hating their bodies, and I feel like that is a large proportion of people who recover—if they get good treatment for eating disorders.

I think that it is pretty clear that if there is no treatment, that what you see is a chronic course of eating disorders throughout the life span. Few people recover from a fairly acute episode without professional treatment, but I also do not think that it is like alcoholism, where the motto is once an alcoholic, always an alcoholic, and the motto is recovering.

I think with bulimia and with the anorexia, that total recovery is possible.

Mr. COATS. When we look at the causes of the problem, and we look at, say, the young adolescents versus young women in their twenties versus women in their thirties or forties, can you make a differentiation as to what the underlying causes are by age group?

Dr. YAGER. I think that is very hard to do now. My sense is that the eating disorders are kind of final common pathways and people get to those places in different directions. For some, it is a matter of development, personality development, being afraid of becoming a woman and all of those things, that you will see in early adolescence.

In some people, I have had patients who develop an eating disorder when they first started on birth control pills or come off birth control pills, or when their last kid leaves home and the empty nest syndrome precipitates an eating disorder. There are all different sorts of straws that break the camel's back, that will lead to the eating disorder.

It is very hard to say that there is any common ground, except that there may be certain kinds of personality predispositions to it. Weaknesses. Not being able to cope, not having a resilient sort of being, or the kind of help that you need from your family at the time that you are going through a difficult period, to kind of make the best of it and to come out on top without breaking down.

Mr. COATS. Laurel, you suggested in your testimony that the chaotic family seems to be an early indicator of potential trouble here.

How would you describe a chaotic family? What do you mean by that?

Ms. MELLIN. I would say a chaotic family is the kind of family that does not know who takes out the trash. So, in other words, the family—this is the kind of family where there is so much—in fact, what chaos is, is too open to change. If there is too little openness to change, the family is rigid. If it is too open to change, they would really be chaotic.

This is a family that is so open to change that they are not organized and systemized and structured in such a way that the children's needs are met. So, many times, if there is a chaos in the family from the basic sense of nurturing and even, you know, getting the permission slips back to school, it just does not happen.

Mr. COATS. But I thought that we also talked about the anorexic patient coming from an enmeshed family and a very highly structured environment.

Ms. MELLIN. Yes. I think that speaks to the diversity of the family systems that can contribute to eating disorders. Certainly, what is considered classical anorexia nervosa, that kind of family is very different than the family that you might be more apt to see in some ways anyway in a bulimic family or in an obese family.

So, there is some diversity.

Mr. COATS. I do not want to over-simplify this because I know it is complex, but is the anorexic patient basically coming out of the enmeshed family and the bulimic and obese patient coming out of the chaotic family? Is that what you are saying?

Ms. MELLIN. There really is more diversity than that, and I think in the last few years, the literature has moved towards looking at the family of eating disorders of obesity, bulimia and various similar conditions and anorexia and not looking at it so classically as we did before.

I think, classically, we said that the anorexic family was enmeshed. They tended to be more chaotic and perfectionistic than perhaps in the bulimic family, and——

Mr. COATS. But it is not quite that clear.

Ms. MELLIN. It is not quite that clear.

Dr. FALLON. I think the studies are just being now conducted and being published to document some of that, and I think that we will see some typologies of families and different kinds of types. There are both a perfect family type and "a chaotic kind of family." In chaotic families, there are inconsistent rules, these are often the kinds of families in which you do see physical and sexual abuse, where you see an alcoholic or where one or both parents are unavailable either due to death, emotional distress, alcoholism, etc.

I think that is being documented not just in clinical observations but in the research that is coming out now.

Dr. YAGER. I was just going to make the point that what is meant by enmeshment, the enmeshed family, is a family in which one or another member almost doesn't know where one begins and the other ends.

So, for example, I might say to you, if you were my kid, "I am cold. Put on a sweater."—that is what is meant by enmeshment. It is the notion of thinking of you as an extension of me but not as a separate person. You can have chaos with that, you can have rigidity with that, but that is what enmeshment means.

The other point that I want to make is that if you really start to look at the mental health of American families, there are a lot of families with a lot of trouble. In one of the studies that we did with bulimia, it turned out that only twelve percent of the respondents said that they did not have some kind of a family problem, depression, alcoholism, an eating disorder or something of that sort.

When you look at the community as a whole, you have lots and lots of families with problems. I would estimate that at least twenty-five percent of American families have major emotional problems. If you take a look at the statistics in California for longevity of marriage, that is, if you take a look at the enduring marriages, marriages that have gone for over ten or fifteen years, if I recall, there was a study published in the L.A. Times that suggested that about twenty-five percent of those long-term marriages were good marriages, and about fifty percent of them were on and off and about twenty-five percent of them were living hells, where the people were locked into some horrible marriage that neither one could get out of. They could not live with and they could not live without each other.

So, we have a lot of trouble with families in the United States. Some of them grow kids with eating disorders, some of them grow kids with teen-age pregnancies, some of them grow kids with alcohol and drug abuse and with depression or with suicide, and all of that, or some mix and match. These are very often not distinct kinds of problems, although one or another manifestation of them may be most dramatic.

I think there are really a lot of troubled families. Some of the things that we are suggesting with respect to intervention, regarding communication and how family members can get along, would have effects not only with eating disorders, but with all of these other kinds of emotional problems across the board.

Ms. MELLIN. Let me just add to that, that the treatment for obesity in children and adolescents is really reparenting. Pardon me. It is parent re-education and learning parenthood skills.

So, even though we start them with talking about diet and exercise or nutrition and exercise, and how the family can support that in their child or adolescent, we do that because that is the agenda they come to us with, is weight. We know that we are probably not going to have much luck in sustaining the weight loss in the long run for obese kids unless we also teach communication, unless we teach how to improve self-esteem in kids, have them question their own values about weight and food, their own emotional use of food, their limit-setting ability and, really, a crash course in parenting even at the stage of adolescence.

Mr. COATS. I think I am over my time here. Thanks.

Chairman MILLER. Congresswoman Boxer.

Mrs. BOXER. Thank you, Mr. Chairman.

Krista, what was it about your therapist that really reached you, because you talked earlier about some therapists that you hated at the time and then your mom said that this therapist, she is just so much? What qualities did she have that really reached you?

Ms. BROWN. Basically, she saw through the wall that I had built up, this big black China wall kind of like, and she saw that, as I said, you know, she would ask me how do you feel and I would say I do not know, and she asked me again, how do you feel, and I said I do not know because I do not know. I did not want to know.

I think she has had experience with an eating disorder herself and I think that is what really broke through. She knew how I felt and the other people I went to, they were professionals with titles, that they had never really felt it themselves. So, I think that hands-on experience really kind of got through to me, and I suddenly—it was like a little crack and then suddenly it widened, you know, through two visits. It took a long time, not just overnight.

I think that is what really reached me.

Mrs. **Boxer**. That is very insightful, Krista, because I think that is so true. A lot of us, we feel comfortable speaking with someone who has shared our problems and knows what it is firsthand.

Looking back over your whole experience with this disease, sort of stepping back from it and looking at it from a distance, was there any point there that you think this thing could have been prevented, and at what point could that have been, how could it have been prevented before it really got a hold?

Ms. **Brown**. No.

Mrs. **Boxer**. You just think it was inevitable, it was going to run its course?

Ms. **Brown**. It had to run its course because, I do not know, I believe things happen for a reason and this happened for me in a weird way, believe me. If I had any other way or any other choice, I would have done something else.

But this had to run its course to bring a lot of things out in my family and just to build that inner self that I had that was about this big and now it is big, bigger, and I think if this would not have happened to me, I might have just kept on going, being depressed, and not feeling good about myself.

Mrs. **Boxer**. So, this was the lightening rod that brought out your problems which in turn brought in the family——

Ms. **Brown**. Exactly.

Mrs. **Boxer** [continuing]. Which in turn got to the root.

Ms. **Brown**. Yes. It brought out what they were trying to deny and so was I, and not everybody in my family sees yet, but I think eventually they will come around and what is important is my inner immediate family. We are feeling better about ourselves.

Mrs. **Boxer**. But if we take your experience and we try to learn from it, we certainly do not want to see a lot of young people going to the point of near death before there is a lightening rod to bring families together.

Ms. **Brown**. Exactly.

Mrs. **Boxer**. So, I guess what we are trying to reach for is what we can do or what policies we can help foster among families and in the schools to prevent such a thing from happening.

Is communication part of it?

Ms. **Brown**. Communication is the key and really, I guess, parents letting it be known that emotions are all right to be felt and depression, anything, that you are not a bad kid if you feel those things, and not putting such an emphasis on the media and, you know, the diet and everything else that goes along because, basically, you will be in your natural body, you know, if you are eating healthy and exercising healthy, you know. You can overeat and stuff, but you do not really have to worry about it that much, and the more emphasis you put on it, the more and more it is going to become a problem, and then along with not feeling your emotions and holding it all inside, it becomes an eating disorder, and a really bad behavior that is hard to control.

Mrs. **Boxer**. So, if we just touch on the issue of communications and trying to foster better communications in the family, among our peers and so on, would you say that more open conversation through the schools about nutrition and health and family problems, would that help? How can you help bring that back to your family? Any suggestions.

I am asking you a question that I do not have the answers to. I would not expect you to have the answers, but have you given that any thought?

Ms. **Brown**. I think it might help with starting in the schools because some families, it does not generate there. It might have to come from some outside source, and it might help if a teacher notices a child is a little bit withdrawn to talk to the family about it and see what kind of situation that family is in.

It is up to the family, basically, and that is what is so out of control because it is up to that person and that family to take care of. I do not know. Just any way to advertise it over the TV or how to put it.

Mrs. **Boxer**. Susan, when you knew that you really needed help for your daughter, you knew that it was beyond your ability to control the situation, was this a big financial burden on the family and did the insurance cover some of these things?

Mrs. **Brown**. In the beginning, in the beginning, it was really hard. I had two coverages of insurance and although they remain nameless, but I had two policies, both would have to meet before committees, such as this, and discuss Krista every single time I billed something. I would bill it five or six times before they would make a decision and the bills were mounting and they are huge and, yes, it is a terrible burden.

In the Serenity Unit, there were people that were turned away after one or two days because their insurance will not cover it, and this is the part that was so touching to me. That is so sad because, I mean, these kids are going home, they could die.

If someone had cancer, you would not send them in and say, by the way, your insurance is not going to cover this, go home and die. It just should not be just because it is an eating disorder.

Mrs. **Boxer**. So, you would say that there are certain families from just your experience that are not getting the help that they need and they are risking the life of a child.

Mrs. **Brown**. There are girls that I know personally which I work with that are not getting help because they are afraid. It is really hard to admit anyway that you have an eating disorder. It is kind of coming out of the closet now.

I mean, it is really that society has put such pressure on women and in men, also, but especially women, it is hard to admit that you have this problem. It shows a real weakness to a lot of people. So, to admit it and then to have to be interrogated and you are literally interrogated by the insurance companies, and I do not want to say that really negative, because they have come through, but I mean to have them come through, it is really hard. It is a hard road.

My files. How many boxes do I have now? There are so many copies and written explanations and I could bring my doctors here and I could have them help me explain to you what we have had to go through to get these things covered. They are not fully covered either. They are covered—we have got excellent insurance. We were lucky, we were real lucky.

Mrs. BOXER. What would you say the bills have been, if you do not mind sharing that with us for this whole process?

Mrs. BROWN. Oh, gosh. We are talking about almost four years. Preston, help. You probably know the hospital visits more. We are talking four years. Preston, we have known Preston for two. No. It is probably—I was going to say probably $160,000, but maybe I am going high. $150,000.

I had to pay out of pocket psychiatrist bills because anorexia was not covered by the two—she went to two psychiatrists before and anorexia was not covered by them. They were not psychologists, they are psychiatric and it was different. It all falls into a different category and they denied it, and, so, I am still paying one of them. I pay them $50 a month. All the doctors will go oh, no, but I have to do it, and, so, it is—we are talking major.

In fact, I really do not want to add it up because I do not want to know.

Mrs. BOXER. Well, I only ask it because we are——

Mrs. BROWN. Okay. I would estimate at least $150,000, and that is enough to wipe anyone out.

Mrs. BOXER. Let me just say that when I asked the question, it was not meant to be nosy.

Mrs. BROWN. Oh, no.

Mrs. BOXER. But to say that what we are doing now in the Congress is catastrophic health care, and we have passed a bill that relates to the elderly and there will be bills coming forward that deal with families, and I think this is very important testimony for us.

I have one last question to the panel of professionals, which is, would you call these eating disorders an American phenomenon? Would you go that far? If you look across the world.

Dr. YAGER. They are a western phenomenon.

Mrs. BOXER. Really?

Dr. YAGER. There is a lot of eating disorders in Western Europe and in Japan, actually. There is very little in the under-developed countries. Remarkably, in the last decade, there has been more from behind the Iron Curtain, but that probably goes along with the black market in designer jeans that is also very strong behind the Iron Curtain.

So, really, Nautilus is going into Moscow. So, we have a lot of global—this is one world, and I think as we have an internationalization of the values that really have started largely in the United States and in Britain, we will have more of this all over.

I was just going to say one or two more things about prevention. I think churches can be very helpful because I think, again, family communication and values can be set in churches and I would encourage people who have large audiences of families to address these issues.

The other thing I think we could probably do is set up on public television almost demonstrations of how parents can talk with kids, how parents can talk with one another, to have classes on how to model, because I think if you know that you are having problems in your family, just being able to see somebody illustrate as in adult education how you may do it wrong and how you may do it right, go practice it, can have a lot of influence, particularly for people who do not have access to therapists and all of that kind of stuff.

It is very important to get demonstrations of how to live well with one another out to everybody.

Mrs. **Boxer**. That is good.

Ms. **Mellin**. I just would like to respond by saying that change in the dramatic increase in obesity in children and adolescents is an American phenomenon in that we do not see this so much in other western countries, this dramatic increase, which is probably secondary and not really walking the way Europeans do as well as some of the social and psychological changes as well as availability.

I would also say that obesity also is not covered by third party reimbursement in this country, and if we see an eight year old who weighs 150 or 170 pounds, that treatment, whether it is in-patient or out-patient, is typically not covered by third party reimbursement, unless there is some other condition associated with it, such as hypertension, diabetes or some such thing. This is a real burden to families also.

Chairman **Miller**. Does California look any different than the nation?

Dr. **Yager**. Probably not. In terms of the internationalization of obesity, a friend of mine who recently came back from the Soviet Union for a scientific conference, and he had a cab driver who asked him a question. "You know", he said, "you Americans, I do not understand you. You are from the richest country in the world, how come your women are so skinny? Implying from his point of view, the Russian women were heavier.

So, I do not know that obesity is really simply an American problem. There is an awful lot of it everywhere.

Ms. **Mellin**. No. What I am looking at, not so much as the problem with the whole population, but the trend in children.

Chairman **Miller**. Which is more than just the notion of fast foods, though, is it not?

Ms. **Mellin**. Right. It goes beyond that, to look at the family system, to look at the trend of dieting and weight preoccupation that actually precipitates weight gain.

I mean, the thing is there is a fifty-eight percent increase in obesity in teen-age girls in the last fifteen years, and only eighteen percent among boys, is perhaps an indication that the dieting the girls start is really ubiquitous, five and ten or eleven, eighty percent of kids are dieting by that time, at least girls are, and some studies may be contributing to this as well as the preoccupation.

Chairman **Miller**. Well, thank you very much for your help and your testimony and your time to be with us. I think it has been a very informative panel. Thank you.

The next panel that the committee will hear from will be made up of Dr. Hans Steiner, who is the Director of the Eating Disorders Program, Children's Hospital at Stanford, Palo Alto; Dr. Joel Killen, who is the Director of the Adolescent Health Project at the Stanford Center of Research and Disease Prevention, Department of Medicine, Stanford University; Linda Zimbelman, who is a Psychotherapist from Hermosa Beach, California, on behalf of the National Association of Anorexia Nervosa and Associated Disorders, Highland Park, Illinois; Vincent Moley, who is the Senior Research

Associate, MRI and Director, Eating Disorders Center, Palo Alto, California; and Dr. Michael Strober, who is the Associate Professor of Psychiatry, Director, Adolescent Eating Disorders Program, from the University of California, Los Angeles.

Let's just take a five minute break here.

[Recess.]

Chairman MILLER. Dr. Steiner, we will begin with you and as with the previous panel, your written statement and supporting documents that you may have will be put in the record in its entirety, and you proceed in the manner in which you are most comfortable.

STATEMENT OF HANS STEINER, M.D., ASSISTANT PROFESSOR OF PSYCHIATRY, DIRECTOR OF TRAINING, DIVISION OF CHILD PSYCHIATRY AND CHILD DEVELOPMENT, STANFORD UNIVERSITY SCHOOL OF MEDICINE; DIRECTOR, EATING DISORDERS PROGRAM, CHILDREN'S HOSPITAL AT STANFORD, PALO ALTO, CA, ON BEHALF OF THE AMERICAN ACADEMY OF CHILD AND ADOLESCENT PSYCHIATRY

Dr. STEINER. Okay. Thank you.

Eating disorders, specifically anorexia and bulimia nervosa, are life-threatening disorders which usually manifest themselves for the first time in adolescence. The disorders present with a complex mixture of psychiatric and medical problems in many different organ systems, creating a complicated situation for diagnosis and treatment.

Mortality in anorexia nervosa is among the highest of any psychiatric disorder, ranging from five to twenty percent, exceeding mortality of many childhood chronic illnesses, such as, for instance, bronchial asthma.

Morbidity after the acute phase of the disorder remains high and is represented by crippling psychiatric syndromes, such as depression, phobias, psycho-sexual dysfunctions, and medical problems, such as brittle bones, chronic amenorrhea and infertility, among others.

Impairment of adaptation in patients is high and on par with the degree of impairment suffered by women afflicted by schizophrenia and alcoholism.

The eating disorders program at Children's Hospital at Stanford is currently following about 200 eating disorder patients in various phases of treatment. Sixty percent of our patients are local, thirty-five percent are regional; that is, from Northern California, and about five percent from out of state.

The mean age in our sample is fourteen in anorexics and sixteen in bulimics. Females predominate heavily, outnumbering boys ten to fifteen to one.

The socio-economic status distribution shows that the mode is generally middle class, but a significant proportion, about twenty-five percent, is low and middle to lower class. This trend is even more pronounced in bulimics alone where thirty-five percent are lower middle to lower class.

Eating disorders in our samples are not restricted to upper and middle class, as is commonly assumed. Furthermore, we have noticed an unusual accumulation of first-generation Americans in our patient sample (twenty percent). Chicanos account for about 13.8 percent and Asian-Americans amount to approximately eight percent. The only ethnic sub-group that is under-represented so far are blacks. We only have one black girl ever in all our years of existence.

Approximately twenty-five percent of our patients qualify for MediCal, further evidence that eating disorders are by no means restricted to the upper socio-economic strata.

In general, lower SES patients tend to have a more protracted and difficult course, have more compliance problems, and poorer overall outcome.

Several studies in the U.S.A., Switzerland, Scotland and the United Kingdom have shown an increase of anorexia nervosa compared to earlier studies in the 1930s. This increase is two to fourfold. Comparable numbers are not available for bulimia nervosa. It is unclear what this increase represents. It is either a true increase of cases or simply improved case finding.

In our own program, the referral rate for patients has doubled in the past six years. Currently, it is generally accepted that anorexia nervosa occurs in approximately .5 to one percent of adolescent females, while bulimia nervosa can be found in one to three percent of adolescents. Thus, both eating disorders represent a significant health problem on the order, for instance, of schizophrenia.

Furthermore, a recent survey of tenth graders has shown that thirteen percent report purging behavior and also report generally poor dietary habits. Females again outnumber the males two to one.

While it is not certain that these behaviors constitute the syndrome of bulimia nervosa, these findings do suggest that unhealthy dietary practices are quite widespread in adolescents.

What do we know about how these things start? What causes them?

Currently, there are no uniformly-accepted etiological models in the field of eating disorders. Most commonly accepted is the notion that multiple risk factors can lead to the disorders, which are seen as a final common pathway. We have several etiological factors.

Attempts are underway to subtype eating disorders in order to clarify most important questions regarding etiology and specificity of treatment. Several risk factors have been implicated but not uniformly endorsed in the literature. Certainly being female is one of them, living in a socio-cultural environment that stresses thinness as an ideal for beauty, having an accumulation of eating disorders, drug and alcohol abuse and depression in other family members, being overweight, living in a western industrialized nation, having difficulty with autonomy, identity and separation, and living in a social climate of exceedingly high performance expectations. Certain morbid personality and family characteristics probably contribute and may be a constitutional hypothalmic dysfunction.

Much research is needed to clarify the role of these factors in the origin and perpetration of these disorders. Most current studies in the field are unable to answer these questions because they are mostly retrospective, i.e. consider these factors only after the disorders have made their appearance. Thus, it is not possible to truly distinguish what is a by-product of the disorder and what truly antedates and maybe causes it.

A few words about treatment. Without knowledge of what can cause these disorders, treatment is generally empirical and nonspecific. Most centers for the treatment of eating disorders are employing a multi-modal treatment program combining individual, family, group and in-patient psychotherapy, behavior modification, cognitive therapy, psycho-pharmacological intervention and other approaches.

With these intensive treatment programs, outcome tends to be generally good. Thirty to forty percent of patients recover in four years, thirty percent continue to be mildly symptomatic, twenty percent are moderately to severely so, and the rest have worsened.

Economical tailoring of programs to individual's needs, though, is not possible, given our limited knowledge about the differential effects of certain treatments. Without such tailoring, some patients may simply not get enough of the modality most needed while others would improve with considerably less effort.

We also have too little information on how to positively identify those patients who have a good prognosis from those who do not. Several factors have been cited in the literature and have also been found in our work to contribute to poor prognosis: the presence of depression, binge-purge behavior, low socio-economic status, long duration of illness, especially untreated, and multiple treatment failures. Yet, relapse prevention is still the most difficult part of the treatment, presumably due to ignorance of all factors contributing to prognosis.

What directions do we see research and treatment going in the near future? In our own research, we are currently pursuing many of these questions that have been raised in my discussion. We are attempting to build a model for eating disorders that is comprehensive enough to accommodate genetic, biological, psychological and social factors, yet specific enough to truly advance prevention and treatment.

The model is built around the assumption of a deficit in the development of these patients. We are assuming a role for factors which leaves individuals especially vulnerable to stress, conflict, arousal and ambiguity and ill-prepared for changes in adolescence.

The beginnings of such a deficit could rest with the hyper-reactivity to stress on the basis of some biological or early experiential factors. These difficulties are then compounded by deficient socialization in the family around issues of conflict and stress. All these problems are finally augmented by social pressures which are only poorly counter-balanced by the individual and the family.

Our research has produced some support for this model. Anorexics' early feeding history, for instance, reflects maternal insecurity, inappropriate handling of food and reliance on structure rather than intuition in handling feeding and hunger. Anorexics and bulimics seem to have deficient defense styles compared to least matched norms indicating difficulties with adaptation. Very young anorexics have the same deficit suggesting that the deficits are present premorbidly. These deficits are present comparing anorexics to a matched group of other chronically malnourished patients, suggesting that these deficits are not a function of malnourishment and pubertal delay.

Deficient defense style seems to be tied to deficient family environments and anorexics and bulimics who handle stress or emotional tasks poorly tend to have a poorer prognosis on two-year prospective follow-up. This is a far cry from a complete picture, but it is a beginning.

We believe that public support in this important field should focus on two main areas. One, the allocation of sufficient funds for research so that many of these questions can be more definitively answered and more patients permanently helped.

Two, the education in schools needs to target issues in dieting and weight control to prevent the further increase of these most serious problems. Such education also would help with the early identification of problematic situations meriting clinical attention.

Our reward will be that this group of patients restored to full health will once more use their considerable talents to contribute to society rather than waste these same talents on inventing more deceptive and dangerous ways of being self-defeating and self-destructive.

[Prepared statement of Hans Steiner, M.D., follows:]

PREPARED STATEMENT OF HANS STEINER, M.D., ASSISTANT PROFESSOR OF PSYCHIATRY, DIRECTOR OF TRAINING, DIVISION OF CHILD PSYCHIATRY, AND CHILD DEVELOPMENT, STANFORD UNIVERSITY, SCHOOL OF MEDICINE, FELLOW, AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY

1)THE PROBLEM

Eating disorders, specifically anorexia and bulimia nervosa, are life threatening disorders which usually manifest themselves for the first time in adolescence. The disorders present with a complex mixture of psychiatric and medical problems in many different organ systems, creating a complicated situation for diagnosis and management. Mortality in anorexia nervosa is among the highest of any psychiatric disorder (5-20%), exceeding mortality of many childhood chronic illnesses, such as e.g. asthma. Morbidity after the acute phase of the disorder remains high, and is represented by crippling psychiatric syndromes, such as depression, phobias, psychosexual dysfunction, and medical problems, such as brittle bones, chronic amenorrhea and infertility, among others. Impairment of adaptation in patients is high and on par with the degree of impairment suffered by women afflicted by schizophrenia and alcoholism.

2) PATIENT POPULATION

The Eating Disorders Program at Children's Hospital at Stanford is currently following approximately 200 eating disorder patients in various phases of treatment. Sixty percent of our patients are local, 35% regional (i.e. from northern California) and 5% from out-of-state. Mean age in our sample is 14.0 in anorexics, 16.3 in bulimics. Females predominate heavily, outnumbering boys 10-15:1. Socio economic status (SES) distribution shows that the mode is middle class, but a significant proportion (25%) is lower middle to lower class. This trend is even more pronounced in bulimics alone, where 35% are lower middle to lower class. Eating disorders in our sample thus are not restricted to upper and upper middle class as is commonly assumed. Furthermore, we have noticed an unusual accumulation of first generation Americans in our patient sample (20%). Chicanas account for 13.8%, Asian Americans amount to approximately 8%, and blacks are clearly under-represented, accounting only for less than 1%.

Approximately 25% of our patients qualify for Medi Cal, further evidence that eating disorders are by no means restricted to the upper SES.

In general, lower SES patients tend to have a more protracted and difficult course, have more compliance problems and poorer overall outcome.

Several studies in the USA (New York), Switzerland, Scotland and United Kingdom have shown an increase of anorexia nervosa compared to earlier studies in the 1930's. This increase is 2-4 fold. Comparable numbers are not available from bulimia nervosa. It is unclear what this increase represents, either a true increase of cases or simply improved case finding. In our own program, the referral rate for patients has doubled in the past six years.

Currently, it is generally accepted that anorexia nervosa occurs in approximately 0.5-1% of adolescent females, while bulimia nervosa can be found in 1-3% of adolescents.

Thus, both eating disorders represent a significant health problem in the order of e.g. schizophrenia. Furthermore, a recent survey of tenth graders has shown, that 13% report purging behavior, and reported generally poor dietary habits. Females outnumbered males 2:1. While it is not certain that these behaviors constitute the syndrome of bulimia nervosa, these findings do suggest that unhealthy dietary practices are quite wide spread in adolescents.

3) ETIOLOGY - THE MULTIPLE RISK FACTOR MODEL

Currently there are no uniformly accepted etiological models in the field of eating disorders. Most commonly accepted is the notion that multiple risk factors can lead to the disorders, which are seen as the final common pathway of several etiological factors.

Attempts are underway to subtype eating disorders in order to clarify most important questions regarding etiology and specific treatment.

Several risk factors have been implicated, but not uniformly endorsed in the literature: 1) Being female. 2) Living in a socio-cultural environment that stresses thinness as an ideal for beauty. 3) having an accumulation of eating disorders, drug and alcohol abuse and depression in other family members. 4) Being overweight. 5) Living in a Western industrialized nation. 6) Autonomy, identity and separation problems. 7) Living in a social climate of exceedingly high performance expectations. 8) Certain premorbid personality and family characteristics. 9) A constitutional hypothalamic dysfunction.

Much research is needed to clarify the role of these factors in the origin and perpetration of these disorders. Most current studies in the field are unable to answer these questions because they are retrospective, i.e. consider these factors only after the disorders have made their appearance. Thus it is not possible to truly distinguish what is a by-product of the disorder and what truly ante-dates it.

TREATMENT

Without knowledge of what can cause these disorders, treatment is generally empirical and nonspecific. Most centers for the treatment of eating disorders are employing a multimodal treatment program, combining individual, family, group, and inpatient psychotherapy, behavior modification, cognitive therapy, psychopharmacological intervention and other approaches. With these intensive treatment programs, outcome tends to be generally good. Thirty to forty percent of patients completely recover in 4 years, 30% continue to be mildly symptomatic, 20% are moderately to severely so, and the rest have worsened. More economical tailoring of programs to individual's needs though is not possible, given our limited of knowledge about the differential effects of certain treatments. Without such tailoring, some patients may simply not get enough of the modality most needed, while others would improve with considerably less effort.

We also have too little information on how to positively identify those patients who have a good prognosis from those who do not. Several factors have been cited in the literature and also have been found in our own work to contribute to poor prognosis: 1) The presence of depression. 2) Binge-purge behavior. 3) Low SES. 4) Long duration of illness, especially untreated. 5) Multiple treatment failures. Yet, relapse prevention is still the most difficult part of treatment, presumably due to ignorance of all factors contributing to prognosis.

5) FUTURE DIRECTIONS

In our own research, we are currently pursuing many of these questions that have been raised in my discussion. We are attempting to build a model for eating disorders that is comprehensive enough to accommodate genetic, biological, psychological and social factors, yet specific enough to truly advance prevention and treatment.

The model is built around the assumption of a deficit in the development of these patients. We are assuming a role for factors which leave individuals especially vulnerable to stress, conflict arousal and ambiguity and ill prepared for changes in adolescence. The beginnings of such a deficit could rest with a hypereactivity to stress on the basis of some biological or early experiential factors. These difficulties are then compounded by deficient socialization in the family around issues of conflict and stress. All these problems are finally augmented by social pressures which are only poorly counterbalanced by the individual and the family.

Our research has produced some support for this model. Anorexic's early feeding history, e.g., reflects maternal insecurity, inappropriate handling of food and reliance on structure rather than intuition in handling feeding and hunger. Anorexics and bulimics seem to have deficient defense styles compared to age matched norms, indicating difficulties with adaptation. Very young anorexics have the same deficits, suggesting that deficits were present premorbidly. These deficits are present comparing anorexics to a matched group of other chronically malnourished patients, suggesting that these deficits are not a function of malnourishment and pubertal delay. Deficient defense style seems to be tied to deficient family environments and anorexics and bulimics who handle stressful emotional tasks poorly, tend to have a poorer prognosis on 2 year prospective follow-up.

This is a far cry from a complete picture but it is a beginning.

We believe that public support in this important field should focus on two areas: 1) The allocation of sufficient funds for research so that many of these questions can be more definitely answered and more patients permanently helped. 2) The education in schools needs to target issues in dieting and weight control to prevent the further increase of these most serious problems. Such education also would help with the early identification of problematic situations meriting clinical attention.

Our reward will be that this group of patients, restored to full health, will once more use their considerable talents to contribute to society rather than waste these same talents on inventing more deceptive and dangerous ways of being self defeating and self destructive.

Facts for Families

from the American Academy of Child and Adolescent Psychiatry

Vol. 1, No. 2

TEENAGERS with EATING DISORDERS

Two psychiatric eating disorders, anorexia nervosa and bulimia, are on the increase among teenage girls and young women. Child psychiatrists are trained to evaluate, diagnose, research, and treat these psychiatric disorders. Often they are asked to help teenagers who suffer from anorexia nervosa and bulimia, characterized by a preoccupation with food.

Parents frequently ask child psychiatrists how to identify symptoms of anorexia nervosa and bulimia. The fact is that many teenagers are successfully able to hide these serious and sometimes fatal disorders from their families for many months and years.

Parents can be on the lookout for various symptoms of anorexia nervosa and bulimia. Child psychiatrists offer these warning signs:

o A teenager with anorexia nervosa is typically a perfectionist and a high achiever in school. At the same time, she suffers from low self-esteem, irrationally believing she is fat regardless of how thin she becomes. Desperately needing a feeling of mastery over her life, the teenager with anorexia nervosa experiences a sense of

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control only when she says "no" to the normal food demands of her body. In a relentless pursuit to be thin, the girl starves herself; 15 to 20 percent of victims may die.

o The symptoms of bulimia are different from those of anorexia nervosa. A victim binges on huge quantities of high-caloric food and then purges her body of dreaded calories by self-induced vomiting or by using laxatives. These binges may be alternated with severe diets, resulting in dramatic weight fluctuations. Teenagers may try to hide the signs of throwing up by running water while spending long periods of time in the bathroom. The purging of bulimia presents serious threats to the victim's physical health, including dehydration, hormonal imbalance and the depletion of important minerals.

With proper treatment, teenagers can be cured of these dangerous eating disorders. If you notice symptoms of anorexia or bulimia in your teenager, ask your family physician or pediatrician for a referral to the child psychiatrist in your area who works comprehensively and effectively in treating these disorders.

# # #

Chairman MILLER. Thank you, Dr. Steiner. Dr. Killen.

STATEMENT OF JOEL KILLEN, PH.D., DIRECTOR, ADOLESCENT HEALTH PROJECT, STANFORD CENTER FOR RESEARCH IN DISEASE PREVENTION, DEPARTMENT OF MEDICINE, STANFORD UNIVERSITY, STANFORD, CA

Dr. KILLEN. Eating disorders have become an important public health concern and may be increasing in prevalence. A thin body type is the cultural ideal for females in modern western society. Dieting is pandemic and has its origin during adolescence. Dieting has only short-term effects on body weight, may retard normal development, and may contribute to subsequent weight gain.

Research indicates that the adult preoccupation with weight and the practice of restrictive dieting and other methods of unhealthful weight regulation have spread to child and young adolescent populations.

At present, little, if any, research effort has been devoted to the promotion of healthful weight regulation among normal-weight children and adolescents. Attention should be focused on the development and evaluation of instructional programs aimed at prevention of restrictive dieting and over-concern with weight and the adoption of healthful weight regulation strategies should be promoted.

Now, a variety of evidence suggests that a thin body type has been embraced as the cultural ideal for females. Gray found that while thirty-eight percent of a sample of college females were under-weight, only five percent believed their weight to be below average.

In another report, thirty percent of nine year olds reported worrying that they were too fat now or feared becoming fat in the future. In our own research, thirty-three percent of tenth grade girls judged themselves to be overweight or very over-weight when, in fact, their weight was within normal range.

Dieting begins at an early age among girls and this evidence is of particular relevance to prevention efforts. For example, Dwyer found that sixty-one percent of high school girls in her sample reported dieting and thirty-seven percent were dieting on the day surveyed. Nine percent reported total fasting and sixteen percent said they used diet pills to help reduce.

In our own work with fifteen year olds, twenty-two percent of girls reported frequent dieting, thirty percent said they dieted occasionally, and ten percent engaged in total fasts. Such over-concern with weight and dieting may be particularly problematic during early adolescence. An warranted fear of obesity coupled with excessive caloric restriction can have a deleterious effect on normal growth and developmental processes.

The need for adequate weight gain and body fat for progression of growth and puberty has been well documented. One study identified fourteen otherwise normal children, who demonstrated inhibited growth, which was linked to caloric restriction arising from fear of becoming fat.

Some researchers argue that the apparent increase in bulimia among women in recent years might be expected since the cultural forces promoting dieting as a pathway to thinness have intensified. As Polivy and Herman have concluded, a dispassionate view suggests that perhaps dieting is the disorder that we should be attempting to cure.

A substantial number of young people may induce vomiting or abuse laxatives to regulate weight. Several research groups have reported prevalences for binge eating and purging in populations ranging from thirteen to seventeen years of age. One unpublished report found that nine percent of nine and ten year olds in the study population reported some form of purging behavior for weight control.

Our own research has focused on fifteen year olds. In one study, thirteen percent engaged in some form of purging for weight control. 10.6 percent of girls practiced self-induced vomiting. Purgers compared to non-purgers were found to diet more, count calories more often, reported greater guilt following excessive eating and fasted more frequently.

In addition, purgers reported more drunkenness and more potentially maladaptive reactions to stressful situations.

In a second study, ten percent showed major symptoms of bulimia and an additional ten percent reported purging for weight control. Binge eaters and purgers reported higher levels of alcohol and marijuana use and greater levels of depressive symptomatology. Although seventy-three percent of binge eaters judge themselves to be overweight to very overweight, few were overweight by objective standards. While only a small percentage of the adolescents in our studies might qualify currently for an eating disorder diagnosis, we conclude that a large group of young people may be at risk for developing such a disorder in the future.

While researchers have called for early intervention to promote the development of healthful weight regulation practices among children and adolescents, little, if any, research has occurred in this area. Since a sizeable number of young people may practice unhealthful weight regulation strategies, prevention programs must target child and adolescent groups.

One important goal of any prevention effort would be instruction in healthy weight regulation practices. Specifically, adolescents should be taught to manage weight via proper nutrition and aerobic physical activity. A primary prevention program may also need to teach students to understand and resist the social influence mechanisms promoting unhealthy attitudes about body weight.

Intervention models upon which healthful weight regulation programs might be based have received relatively thorough testing in the field of adolescent smoking prevention. A substantial body of research provides evidence for the effectiveness of school-based programs designed to teach adolescents to become aware of the varied social pressures to smoke and to help them acquire skills to resist the social influence.

In summary, a thin body type has become the predominant cultural ideal for females in modern western society. Dieting is pandemic in our society, has only short-term effects on body weight, may retard normal pubertal development, and may contribute to subsequent weight gain and distorted eating. Even by sixth and seventh grade, practices, such as self-induced vomiting, are being used for weight control and may be linked to increased substance use.

Little, if any, research has focused on the promotion of healthful weight regulation among normal weight children and adolescents. Educational programs designed to promote healthful weight regulation may help prevent the development of obesity, excessive caloric restriction, and improve adolescent self-image and sense of wellbeing.

Thank you.

[Statement of Joel Killen, Ph.D., follows:]

PREPARED STATEMENT OF JOEL D. KILLEN, PH.D., STANFORD CENTER FOR RESEARCH IN DISEASE PREVENTION, DEPARTMENT OF MEDICINE, STANFORD UNIVERSITY, STANFORD, CA

Eating disorders have become an important public health concern and may be increasing in prevalence. A thin body type is the dominant cultural ideal for females in modern Western society. Excessive caloric restriction is pandemic, and has its origin during adolescence, typically after the onset of puberty. Excessive caloric restriction has only short term effects on bodyweight, may retard normal pubertal development, and may contribute to subsequent weight gain and disordered eating. Research indicates that the adult preoccupation with weight and the practice of restrictive dieting and other methods of unhealthful weight regulation have spread to child and young adolescent populations. At present, little, if any, research effort has been devoted to the promotion of healthful weight regulation among normal weight children and adolescents. The results suggest that attention should be focused on the development and evaluation of instructional programs aimed at (a) prevention of restrictive dieting and overconcern with weight and (b) adoption of healthful weight regulation strategies.

The need for prevention research rests on these assumptions: (a) the desire to be thin is pervasive among females in modern society; (b) in response to this desire, dieting and weight concerns have attained normative status among females in our culture; (c) dieting produces only temporary weight loss and may undermine subsequent weight loss while (d) promoting the development of disordered eating; (e) significant numbers of younger adolescents may practice unhealthful methods of weight regulation and may be at risk for developing eating disorders; (f) intervention models which may guide the development of programs designed to prevent adoption of unhealthful weight regulation strategies by adolescents are sufficiently developed to permit testing.

The thin body type has become the cultural ideal

A diverse body of evidence ranging from clinical observation to content analyses of popular media suggests that a thin body type has been embraced as the cultural ideal for females (1). Gray found that although 38% of her sample of college females were statistically underweight, only 5% believed their weight to be below average (2). In another report, 30% of 9 year olds reported worrying that they were too fat now or feared becoming fat in the future, 81% of 10 year olds in the study were restrained eaters, and 9% of 9 year olds reported purging behavior for the purpose of weight control (3). In our own research, 33% of tenth grade females judged themselves to be overweight or very overweight when in fact their weight was within 75% of age-adjusted BMI.

Such overconcern with weight and dieting may be particularly problematic during early adolescence. An unwarranted fear of obesity coupled with excessive caloric restriction can have a deleterious impact on normal growth and developmental processes. The need for adequate weight gain and body fat for progression of growth and puberty has been well documented. One study identified 14 otherwise normal children who demonstrated inhibited growth which was linked to caloric restriction arising from fear of becoming fat (4).

Excessive caloric restriction /weight concerns are normative

Many studies have demonstrated that a large percentage of women view themselves as overweight and engage in dieting to reduce (5). A 1978 Nielsen survey showed that 45% of all households in America contained a dieter at some point during the year and that 56% of all women aged 24-54 diet (6). As one eminent clinician has said, the popular media convey the message "...day in and day out, that one can be loved and respected only when slender" (7).

Data suggesting that dieting begins at an early age among females is of particular relevance to prevention efforts. For example, Dwyer (8) found that 61% of high school women in her sample reported dieting and

37% were dieting on the day surveyed. Nine percent reported total fasting and 16% said they used diet pills to help reduce. In our own work with 15 year olds, 22% of the females reported frequent dieting, 30% said they dieted occaisionally and 10% engaged in total fasts (9).

Why excessive dieting is not a healthful weight reduction strategy

Research suggests that caloric restriction is ineffective in achieving long-term weight loss. Substantial restriction produces reductions in metabolic rate as the body adjusts to utilize energy more efficiently. In some studies, restriction produces decrements in basal metabolic rate as much as 30% (10). This means that, as a result of restriction, fewer calories are needed to maintain or regain bodyweight. Once dieting ends, there is ample evidence that metabolic rate does not recover immediately so that weight gain may occur rapidly following resumption of normal eating. The suppression of metabolic rate by dieting is most evident when initial metabolic rates are low. Therefore, women may have more difficulty meeting personal weight loss goals than men since their metabolic rates tend to be lower. In addition to metabolic rate reduction, other physiological changes occur with restriction which contribute to more efficient fuel utilization and increased storage of fat. Thus, in the end, dieting produces effects which are the opposite of those intended (5).

4. Evidence suggesting that dieting may potentiate disordered eating

Dieting may actually potentiate disordered eating in those who are vulnerable (11). Polivy and Herman (12) reviewed evidence from human studies suggesting that dieting may precede binge eating in a causal chain. A variety of clinical reports indicate that bulimics and bulimic anorexics engage in dieting attempts prior to the emergence of bulimic symptoms. For example, Garfinkel et. al (13) found that dieting preceded binge eating, on average, by more than 1.5 years. Dally and Gomez (14) reported that binge eating typically occurred about 9 months after the initiation of dieting. In another investigation, 30 of 34 bulimics reported dieting prior to the onset of bulimia (12).

Keys' study (15) of the effects of starvation on a group of World War II conscientious objectors provides further support for the relationship between dieting and binge eating. After volunteers dieted to approximately 74% of their initial weight they were allowed access to unlimited quantities of food. Even after the men had regained the lost weight they continued to binge eat and gorge at meals in a fashion uncharacteristic of their predeprivation eating behavior.

Precisely how both physiological and psychological factors interact in some persons to produce disordered eating and weight regulation remains to be determined. However, some researchers argue that the apparent increase in bulimia among women in recent years might be expected since the cultural forces promoting dieting as the pathway to thinness have intensified. As Polivy and Herman conclude, "A dispassionate view suggests that perhaps dieting is the disorder that we should be attempting to cure."

5. Evidence of binge eating and purging among younger children and adolescents

There is evidence that a substantial number of young people may employ unhealthful strategies to regulate weight. Several research groups have reported prevalence (16, 17) for binge eating and purging in populations ranging from 13 to 17 years of age. One unpublished report found that 9% of 9 and 10 year old girls in the study population reported some type of purging behavior (3). Our own research has focused on nonpatient samples of 15 year olds. In one study, 10.6% of girls vomited to control weight with 8.3% using diet pills and 6.8% employing laxatives. Purgers compared to nonpurgers were found to diet more, count calories more often, reported greater guilt following excessive eating and fasted more frequently. In addition, purgers reported more drunkeness and more potentially maladaptive reactions to stressful situations. In a second study, 10% showed major symptoms of bulimia and an additional 10% reported purging for weight control. Binge eaters and purgers reported higher levels of substance use and greater levels of depressive symptomatology. Although 73% of binge eaters judged themselves to be overweight to very overweight, few were overweight by objective standards. While only a small percentage of the adolescents in our studies might qualify for an eating disorder diagnosis, we conclude that a large group of young people may be at risk for developing such a disorder in the future.

6. Potential models for prevention research

Although researchers have called for early intervention to promote the development of healthful weight regulation practices among children and adolescents (18, 19), little if any research, has occurred in this area. Since a sizeable number of young people may practice unhealthful weight regulation strategies, prevention programs must target child and adolescent groups, particularly females. One important goal of any prevention effort would be instruction in healthful weight regulation practices. Specifically, adolescents should be taught to manage weight via proper nutrition, diet and aerobic physical activity. A primary prevention program may also need to teach adolescents to understand and resist the social influence mechanisms promoting unhealthy attitudes about bodyweight. Intervention models upon which healthful weight regulation programs might be based have received relatively thorough testing in the field of adolescent smoking prevention. A substantial body of research provides evidence for the effectiveness of school-based programs designed to teach adolescents to become aware of the varied social pressures to smoke and to help them acquire skills to resist social influence (20).

In summary, a thin body type is the dominant cultural ideal for females in modern Western society. Excessive caloric restriction is pandemic in our society. Even by 6th and 7th grade, unhealthful weight regulation practices such as self-induced vomiting are being practiced and may be linked to other unhealthful behaviors. Excessive caloric restriction has only short term effects on bodyweight, may retard normal pubertal development and may contribute to subsequent weight gain and disordered eating. Little, if any research, has focused on the promotion of healthful weight regulation among normal weight children and adolescents. Educational programs designed to promote healthful weight regulation may help prevent the development of obesity, excessive caloric restriction, and improve adolescent females' self-image and sense of well-being.

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Chairman **Miller**. Thank you. Ms. Zimbelman.

STATEMENT OF LINDA ZIMBELMAN, MA, MFCC, PSYCHOTHERAPIST, HERMOSA BEACH, CA, ON BEHALF OF THE NATIONAL ASSOCIATION OF ANOREXIA NERVOSA AND ASSOCIATED DISORDERS, HIGHLAND PARK, IL

Ms. **Zimbelman**. I would like to thank you for inviting me and I would like to speak to you informally because you have a formal statement.

I have spoken to over 30,000 women as a therapist and as a director of ANAD, which is an eating disorders association, which reaches out to people in the United States and now Europe.

I go into the schools, I speak to the children in the schools, I go to the hospitals, I speak with their parents, and I wish to say that Karen Carpenter is not the only person who died from anorexia nervosa, as we can see from our fabulous client who had the courage to stand up here and tell her story to all of us, which was extremely important for her today, I may add, because this was exactly what I am seeing everyday in my office and my organization is seeing.

We truly have a fat phobia, food fear and food abuse going on at this time. I feel that the re-education of our youth and prevention is the order in which we should move forward.

My association works very hard at prevention. We educate and we hand out many materials. We mail many materials all over the United States to parents who have found some signs and are not understanding. I have many men that call me now, husbands, boyfriends, very disturbed about not being able to handle the situation and seeing their wives and daughters and girlfriends actually starving to death.

The organization that I work for is really wanting funds to help the people that cannot afford these programs that are fantastic. We want funding for people that now have a $150,000 bill and cannot pay for it. I have girls that I cannot get into the hospital. If I could have just brought my tape recorder to you and played my phone messages for this last week, that is really what I should do some time, to hear the devastation that is going on, the panic. These girls will do anything at the point to where they see blood while vomiting, to where I have had a mother say, I have found feces, fecal matter, if you can imagine, because the daughter has taken so many laxatives.

This is like a disbelief that this is happening. The dieting is a disease now, it was a pasttime and a hobby, it is no longer that. We have crossed all cultural barriers at this point, and all economic barriers. It is no longer for the rich or young, the white, as one time it was or we thought it was. That is not true.

Also, my organization is reporting blacks and Asians with this problem. So, it is definitely going over the line.

You have to realize that many ten year olds can get diet pills, laxatives, or Ipecac. Karen Carpenter died of Ipecac, which is a vomiting-induced kind of a medication or whatever you want to call it and to which that stuff is so available to these girls.

We are also seeing elementary school children, these are children now that we are talking about, we are not just talking about adults or adolescents, we are moving into age seven and eight and nine. When you go into the elementary schools, these children are now dieting, whether it be that they are the same generation of the Weight Watchers group. I have also had in my office grandmother, mother and daughter.

I am now doing a personal study on tracking pregnant bulimics and I am going to track the health of the child while the mother is pregnant and throwing up, and I have several cases I am watching for that. That will be interesting to see.

What I really want to stress because everybody has covered everything so beautifully today is prevention and education is in order. To go into the schools and give classes on drug abuse, alcohol and eating disorders. To be able to go in and talk about family and family systems and communication, sexuality and the things in which these children do not know about and cannot find out about unless they are with their friends.

I also have large groups of people, young girls, who are binging and purging in groups now, in groups, they do it, and in these sororities, they have rest rooms, they do it in the rest rooms. It is totally and completely out of hand.

A.N.A.D. is going to call for an eating disorder week in April in which I hope that all the professional people in my field will join together and bring this to the attention of the media in a more positive vein.

The other thing I want to stress is the important work that my friend has done on abuse, eating disorders. We are seeing a secondary manifestation of sexual abuse and sexual trauma. I cannot stress this enough in my work and the work in which my organization is also seeing this information.

I just want to close with, after ten years, twenty-four specialists, five institutions, three hospitals, shock treatment and $105,000, my daughter died, age twenty-one. The tens of thousands of letters our association receives annually testify that eating disorders are devastating and may appear in any type of family or life situation. Cost of treatment may be overwhelming. We receive thousands of requests for low-cost treatment programs and we really need this funding because the girls are released after three days and do have to go back on the street and some of these girls are dying.

I am a former bulimic. I am recovered six years, suffering from anorexia nervosa and bulimia since 1966. I do want to say that as a therapist, having this disorder has helped me as my fellow therapists here in understanding the girls.

Many therapists and doctors do not want to treat these girls because they are not educated unless you get them into a care unit. They do not know how to handle them. They are very rough in terms of being narcissistic and borderline and depressed personalities.

So, I thank you, and if you do want to ask me personal as well as professional questions, I am available.

[Prepared statement of Linda Zimbelman follows:]

SCHOOLS IN 47 STATES INDICATES THAT EATING DISORDERS ARE EPIDEMIC IN THIS POPULATION.

IN 33 CASES RECENTLY REPORTED TO ANAD OF CHILDREN 12 AND YOUNGER, TWO ARE FIVE YEARS OLD AND THE MEDIAN AGE IS NINE YEARS OLD.

IN STUDIES UNDERTAKEN BY ANAD AND OTHERS, THE AGE OF VICTIMS RANGE FROM 10 TO OVER 70 WITH THE LARGEST NUMBER OF REPORTED CASES BEING PEOPLE IN THEIR TWENTIES.

IN A RECENTLY COMPLETED STUDY OF 121 CURED BULIMICS, THE MEAN DURATION OF THE ILLNESS WAS 7.6 YEARS. THE RANGE WAS FROM SIX MONTHS TO 26 YEARS.

MORTALITY RATES ARE EXTREMELY DIFFICULT TO DOCUMENT, BUT THE FOLLOWING LETTER TO ANAD POINTS OUT THE TRAGIC POSSIBLITIES AND HIGH COST OF TREATMENT:

> AFTER TEN YEARS, TWENTY-FOUR "SPECIALISTS", FIVE INSTITUTIONS, THREE HOSPITALS, SHOCK TREATMENT, AND $105,000 MY DAUGHTER DIED, AGE: 21.

THE TENS OF THOUSANDS OF LETTERS OUR ASSOCIATION RECEIVES ANNUALLY TESTIFY THAT EATING DISORDERS ARE DEVASTATING AND MAY APPEAR IN ANY TYPE FAMILY OR LIFE SITUATION. COSTS OF TREATMENT MAY BE OVERWHELMING. WE RECEIVE THOUSANDS OF REQUESTS FOR LOW COST TREATMENT PROGRAMS.

PREPARED STATEMENT OF LINDA ZIMBELMAN, M.A., MFCC, HIGHLAND PARK, IL

WE WISH TO THANK CONGRESSMAN GEORGE MILLER AND OTHER MEMBERS OF THE SELECT COMMITTEE ON CHILDREN, YOUTH AND FAMILY FOR INVITING ANAD - THE NATIONAL ASSOCIATION OF ANOREXIA NERVOSA AND ASSOCIATED DISORDERS TO TESTIFY BEFORE THIS COMMITTEE ON BEHALF OF THE MILLIONS OF AMERICANS SUFFERING FROM EATING DISORDERS AND THEIR FAMILIES.

THERE IS GROWING EVIDENCE THAT ANOREXIA NERVOSA AND BULIMIA ARE AMONG THE LARGEST AND MOST SERIOUS ILLNESSES IN OUR COUNTRY. IT IS A MYTH THAT THIS DISEASE IS THE CAPRICIOUS CHOICE OF A SMALL POPULATION OF WELL-TO-DO PEOPLE, SUCH AS YUPPIES.

THESE TERRIBLE ILLNESSES STRIKE YOUNG AND OLD, MALE AND FEMALE, RICH AND POOR, INCLUDING MINORITIES, REGARDLESS OF RACE OR CREED. ALTHOUGH THEY KILL, RUIN LIVES, AND ARE EXTREMELY DIFFICULT FOR OTHER FAMILY MEMBERS, PROGRAMS FOR EATING DISORDERS OF THIS KIND HAVE YET TO RECEIVE GENERAL SUPPORT OR UNDERSTANDING.

WE ESTIMATE THAT THERE ARE 7,000,000 WOMEN AND 1,000,000 OR MORE MEN SUFFERING FROM ANOREXIA NERVOSA AND/OR BULIMIA IN THE UNITED STATES. AN ON-GOING ANAD STUDY OF THOUSANDS OF HIGH SCHOOL STUDENTS IN 472

DIETING, LOW SELF-ESTEEM, COPING WITH STRESS, AND OUR CULTURAL OBSESSION WITH SLENDERNESS ARE AMONG THE FACTORS WHICH LEAD TO EATING DISORDERS.

ANOREXIA NERVOSA HAS BEEN CALLED THE DIETING DISEASE SINCE AN IMPLACABLE REFUSAL OF FOOD AND CONCERN WITH WEIGHT FREQUENTLY EMERGES FROM A COURSE OF DIETING: OBSESSIVE EXERCISING, A DISTORTED BODY IMAGE, LOW SENSE OF SELF- ESTEEM, UNDUE PERFECTIONISM, PREOCCUPATION WITH STUDY, ISOLATION AND GUILT ARE OFTER OTHER SYMPTOMS PRESENT.

ANOTHER ASPECT OF THIS ILLNESS KNOWN AS BULIMIA, BULIMAREXIA OR BULIMIA NERVOSA, IS CHARACTERIZED BY COMPULSIVE BINGE EATING, OR BINGE EATING FOLLOWED BY PURGING THROUGH VOMITING, LAXATIVES, OR DIURETICS. PEOPLE UNABLE TO VOMIT SOMETIMES EMPLOY AN EMETIC SUCH AS IPECAC. THIS BEHAVIOR WAS RESPONSIBLE FOR THE DEATH OF KAREN CARPENTER. THE CAUSE MIGHT NOT HAVE BEEN IDENTIFIED IF THE DEATH HAD OCCURRED IN ANOTHER STATE. CALIFORNIA AT THAT TIME WAS ONE OF TWO STATES WHICH TESTED FOR THE PRESENCE OF EMETINE TOXICITY DURING AUTOPSY.

THIS SELF-DESTRUCTIVE BEHAVIOR WASTES YEARS OF THE LIVES OF INDIVIDUALS WHO WOULD OTHERWISE CONTRIBUTE THEIR INTELLIGENCE AND SENSITIVITY TO PERSONAL GROWTH AND TO SOCIETY INSTEAD OF SPENDING YEARS IN SUFFERING AND ISOLATION. IF THE INDIVIDUAL IS NORMAL WEIGHT (AS MANY BULIMICS ARE), THE TORMENT, ISOLATION, AND PREOCCUPATION WITH WEIGHT AND FOOD ARE EQUALLY DISTURBING.

WHILE TRULY SIGNIFICANT ADVANCES HAVE BEEN MADE IN FIGHTING EATING DISORDERS, WE HAVE A LONG WAY TO GO. FOR INSTANCE, THE FEDERAL GOVERNMENT ALLOCATES TENS OF MILLIONS EACH YEAR FOR OTHER ADDICTIVE SYNDROMES, AND BY CONTRAST, VERY LITTLE FOR EATING DISORDERS.

EVERY STATE HAS EXTENSIVE PROGRAMS FOR NUMEROUS OTHER ILLNESSES; WE KNOW OF NO STATE WHICH HAS ADEQUATE PROGRAMS TO COMBAT ANOREXIA NERVOSA AND BULIMIA.

THERE IS SO MUCH NEED AND SO LITTLE FINANCIAL SUPPORT. DAMAGED LIVES AND RISING NUMBERS OF VICTIMS ARE DIRECTLY RELATED TO LACK OF FUNDS.

THROUGH A VARIETY OF LOCAL AND NATIONAL PROGRAMS, ANAD PROVIDES LOW COST SERVICES FOR THOUSANDS OF VICTIMS AND THEIR FAMILIES EACH YEAR. OUR SUPPORT GROUPS IN 45 STATES ARE FREE. OUR EDUCATION/PREVENTION PROGRAMS REACH AND ASSIST HUNDREDS OF THOUSANDS ANNUALLY. WE REGULARLY PROVIDE FREE MATERIAL FOR THOUSANDS OF SCHOOLS. WE ARE AN ASSOCIATION OF OVER 250 AFFILIATED CHAPTERS AND SUPPORT GROUPS IN THE UNITED STATED, AND WITH AFFILIATED GROUPS IN THREE FOREIGN COUNTRIES.

EVEN SMALL AMOUNTS OF FUNDS ALLOCATED FOR PROGRAMS, LIKE ANAD'S, WHICH REACH DIRECTLY INTO OUR LOCAL COMMUNITIES AND ADDRESS NATIONAL CONCERNS, WOULD GREATLY ENHANCE THE DELIVERY OF SERVICES IN AN AREA OF VERY GREAT NEED.

THANK YOU.

ANAD SERVICES AND PROGRAMS

The high points of ANAD services over the past several years have been mailing replies to hundreds of thousands of requests for assistance and information; responding to tens of thousands of hot-line calls; sending educational packets to thousands of junior and senior high schools, libraries, colleges, sororities, civic and health care organizations; developing and assisting ANAD support groups in 44 states, Canada, and West Germany; supplying hundreds of thousands of referrals to those seeking a therapist or treatment center; cooperating nationally and locally with television, radio, newspapers and magazines to bring responsible reports to millions of people; providing information to the public at health fairs across the nation; sponsoring lecture series centered on coping with and overcoming eating disorders; participating in several research projects; establishing an effective consumer protection program; fighting all forms of insurance discrimination; and publishing a national newsletter which reaches thousands of families.

FACTS ABOUT ANOREXIA NERVOSA AND BULIMIA

Anorexia nervosa and its associated syndrome, bulimia, are extremely widespread and dangerous problems. The chief symptoms are self-induced starvation and/or binge eating and purging. Thousands of cases report ill health, psychological impairment, shame, guilt, withdrawal and isolation - all leading to devastated lives. The illness is highly destructive to other family members as well. The greatest tragedy of anorexia nervosa and bulimia is that hundreds of thousands of people, mostly young women, are its innocent victims.

Several facts point to the impact of these eating disorders on individuals and families:

- ANAD now believes that there are millions of victims in this country alone. It is estimated that six percent of serious cases die.
- An estimated ninety percent are women. Male cases are being reported with increasing frequency.
- The illness can lead to death or life-long problems in those of normal weight who compulsively binge and purge and in the self-starver, but it can be cured.
- ANAD research surveys and reports prove that victims may be rich or poor, young or old, of all racial and religious groups.
- Although most anorexics or bulimics start in their teens, a significant number are now in their upper twenties, thirties, forties or older. More cases are being reported in the eight to eleven age bracket.

ANAD

NATIONAL ASSOCIATION OF
ANOREXIA NERVOSA AND ASSOCIATED DISORDERS, INC. - ANAD

National non-profit educational and self-help organization.
Dedicated to alleviating problems of eating disorders.

CURRENT PROGRAMS

COUNSEL: ANAD has provided counsel and information to thousands of anorexics and bulimics, families, and health professionals. Letters and phone calls requesting information and assistance come from all over the U.S.A., the Chicago area, Canada, and from other countries.

REFERRAL LIST: ANAD has located more than 2,000 therapists, hospitals, and clinics in the U.S.A. and Canada treating anorexia nervosa and bulimia. Referrals are provided to anorexics/bulimics and families seeking professional assistance.

EARLY DETECTION: ANAD developed this program to alert parents, teachers, and others to the dangers of anorexia nervosa and bulimia and to the value of early detection and treatment.

EDUCATION: ANAD distributes information about eating disorders to health professionals and other interested people to inform them of the various aspects of this dangerous problem. The organization's goal is to assist them to better understand and respond to the needs of victims of eating disorders.

Libraries, schools, universities, and other institutions serving a broad public use ANAD as a resource center. ANAD sponsors and provides staff or resources to facilitate lectures, workshops and seminars nationwide.

Through ANAD's efforts, articles on eating disorders have appeared in hundreds of newspapers and magazines. ANAD has participated in numerous radio and television programs.

CHAPTERS AND SELF-HELP GROUPS: ANAD is assisting in the formation of chapters and self-help groups in order for anorexics and their families to meet others with similar problems. There are now affiliated groups in most states of the nation as well as Canada and West Germany. The establishment of ANAD Chapters provides accessibility to advocacy and educational programs for communities throughout the nation.

NATIONAL NEWSLETTER: ANAD distributes its national newsletter to thousands of anorexics, bulimics, concerned family members, health professionals and schools to provide an exchange of feelings and ideas and to help educate about preventing and overcoming eating disorders.

RESEARCH: ANAD has completed a national research project involving 1,400 anorexics/bulimics and has now launched a much larger research project aimed at determining the incidence of these eating problems among high school students in the United States. The Association is undertaking or assisting the development of several other research projects.

INSURANCE DISCRIMINATION: ANAD is working to halt widespread insurance discrimination against the sufferers of anorexia nervosa and bulimia.

CONSUMER ADVOCACY: ANAD actively fights against the production, marketing and distribution of dangerous diet aids and the use of misleading advertising.

ANAD programs are an important adjunct to medical and psychological treatment. By maintaining a close association with therapists, other health professionals, and hospitals in the community, ANAD programs encourage appropriate techniques in dealing with eating disorders. All ANAD services are free.

Chairman MILLER. Thank you. Mr. Moley.

STATEMENT OF VINCENT MOLEY, MFCC, SENIOR RESEARCH ASSOCIATE, MRI; DIRECTOR, EATING DISORDERS CENTER, PALO ALTO, CA

Mr. MOLEY. Okay. I am here in part as a member of the American Association of Marriage and Family Therapy also.

While the purpose of this testimony is not to perpetuate a dogma eat dogma adversarial argument concerning the relative merits of different models and etiology and treatment in eating disorders as it is self-evident that these disorders encompass multi-dimensional problems requiring a multi-dimensional approach, and due to the time constraints of this testimony, I will emphasize the importance of a family focus for understanding and treating eating disorders.

Over the last ten years, there appears to have been a traumatic increase in the incidence of anorexia nervosa, self-starvation, bulimia, binging and purging, and compulsive over-eating. The increase in these disorders has been particularly acute among adolescent and college-age women, and these disorders can exact a high initial personal emotional health, academic and economic cost for both the individual and her family.

In addition, they are frequently associated with longer-term erosion of self-esteem, self-efficacy, also health problems, and productivity stretching from adolescence through early adulthood and even through subsequent generations.

The position of this testimony is that while these disorders encompass a range of medical, psychological and social problems, a powerful and neglected focus for prevention treatment is within the context of the patient's family.

In promoting the family as the focus of treatment for eating disorders, I do not intend to imply that the families are to blame for the cause of the problem in the first place. It is now clear that many of the familial characteristics previously held as being causal may more accurately be understood as family stress adaptation responses to having an ailing distressed offspring.

Typically, parents and family members are doing the best they can in difficult circumstances or fear that they may be unwittingly perpetuating the eating problem. In sum, parents are eager, if not desperate, to do something, and effective family-based interventions give them something useful to do.

Perhaps the most persuasive argument accounting for the recent increase in eating disorders is the corresponding construction of a societal to-do against fatness in women. From this societal perspective, positive attributes of attractiveness, self-discipline, health, education, moral virtue, youth and excellence are associated with slimness as converse with fatness.

Unfortunately, the prescribed route to slender conformity is dieting, which appears to be a strategy of weight control and body shape modification that may, in fact, exacerbate the very problem it is intended to solve.

Taken together, these factors create a complex in which many women, if not most, are at risk for developing eating disorders. In fact, an area of neglected research is the precise way in which most women in society avoid eating disorders or, having developed them, stop using them.

Once an eating disorder has become established, however, it appears to share certain characteristics with other forms of substance abuse encompassing a variety of intra- and inter-personal functions, particularly in the area of conflict resolution.

In a self-perpetuating addictive cycle, the individual achieves short-term relief from distress at the cost of being in a worse predicament which requires more relief. On the counter point to this cycle of self-intoxication and I use the term self-intoxication mainly in cases of severe anorexia or very frequent binging and purging, that the counter point to this cycle of self-intoxication is one of self-efficacy and effective conflict resolution which I would propose could be successfully promoted within the context of the patient's family.

In terms of prevention and treatment, I think that the primary relevance of a family focus to eating disorders in the domain of prevention and treatment as opposed to—its primary relevance is in the domain of prevention and treatment as opposed to etiology.

And in terms of prevention, while the locus of etiology-eating disorders may lie within the sort of macro societal values that have been discussed by other speakers, such factors are notoriously difficult to change directly. However, the impact of these values on individuals can be powerfully mediated by the micro-system of the family, and a comprehensive model of prevention for eating disorders should aim at educating parents concerning early signs of potential eating problems and, in addition, help them in promoting nutritional and exercise regimes.

I would argue that such preventive programs should also provide models and guidelines for effective conflict resolution and the promotion of self-efficacy among offspring.

This might include inoculating offspring against unrealistic societal expectations that have been discussed by the other speakers.

Such preventive education could have the added advantage of preempting the transmission of maladaptive patterns within the family through subsequent generations, and while much data already exists for such preventive programs, additional data should be generated by promoting research on normal families throughout the family life cycle.

A great deal of research in the family field has been a problem of pathological families or problem families than generalizations are made to sort of large populations of families and that neglected area of research is precisely how those families negotiate the difficulties of life extremely successfully.

In terms of treatment, the benefits of family-ordered treatment are multiple. They can support the efforts of medical and individual approaches. They can help the patient break a cycle of substance abuse and resolve personal and family conflicts more effectively. They can pre-empt relapse and provide continuity of care.

Finally, they can build upon family strengths, reduce inter-familial stress, and in creating a context of competence, prevent further familial demoralization with its potentially deleterious effects upon other members of the familial and marital systems.

Effective family treatment programs provide clear guidelines for in-home behavioral management and conflict resolution. They provide a counter-point to frequently fragmented treatment course in which the individual patient may fall between the cracks of a panoply of external treatment resources.

In addition, by defining the eating disorder problem as partially a family problem, combined with clear problem-solving strategies, the individual patient is destigmatized and a family crisis may be turned into an opportunity for adaptive change.

In summary, there is now clear research-based evidence that family focused interventions, are clinically and economically cost-effective in the treatment of eating disorders and recent developments in family systems, theory suggest that families are the ideal target for preventive programs in eating as well as other child and adolescent disorders.

[Prepared statement of Vincent Moley follows:]

PREPARED STATEMENT OF VINCENT MOLEY, M.F.C.C., SENIOR RESEARCH ASSOCIATE AT THE MENTAL RESEARCH INSTITUTE, (MRI) IN PALO ALTO AND THE DIRECTOR OF THE EATING DISORDERS CENTER AT MRI, PALO ALTO, CA

VINCENT A. MOLEY M.F.C.C, is a senior research associate at the Mental Research Institute, (MRI) in Palo Alto and is the Director of the Eating Disorders Center at MRI. He has published and lectured widely on the applications of time-limited therapy to a variety of family problems including eating disorders.

INTRODUCTION

The purpose of this testimony is not to perpetuate a "dogma eat dogma" adversarial argument concerning the relative merits of different models of etiology and treatment in eating disorders. It is self-evident that these disorders encompass multidimensional problems requiring a multidisciplinary approach. Due to the time constraint of this testimony I will emphasize the importance of a family focus for understanding and treating eating disorders.

THE PROBLEM

Over the last 10 years there appears to have been a dramatic increase in the incidence of Anorexia Nervosa, self-starvation, Bulimia, bingeing and purging, and compulsive overeating. The increase in these eating disorders has been particularly acute among adolescent and college age women. These disorders can extract a high initial personal, emotional, health, academic and economic cost from both the individual and her family. In addition, they are frequently associated with a longer term erosion of self-esteem, self-efficacy and productivity stretching from adolescence through early adulthood, and even through subsequent generations. The position of this testimony is that while these disorders encompass a range of medical, psychological and social problems, a powerful and neglected focus for prevention and treatment is with the context of the patient's family.

ETIOLOGY

In promoting the family as the locus of treatment for eating disorders, I do not intend to imply that the family is their primary etiological/causal agent. It is now clear that many of the familial characteristics previously held as being etiologic can be more accurately understood as family stress adaptation responses to having an ailing distressed offspring. Typically, parents and family members are doing the best they can in difficult circumstances, albeit that they may be unwittingly perpetuating the eating problem. In sum, parents are eager, if not desperate to do something and effective family based interventions give them something useful to do. Perhaps the most persuasive argument accounting for the recent increase in eating disorders is the corresponding construction of a societal taboo against fatness in women. From this societal perspective, positive attributes of attractiveness, self-discipline, health, education, moral virtue, youth and excellence are associated with slimness, their converse with fatness. Unfortunately, the prescribed route to slender conformity is dieting, which appears to be a strategy of weight control and body shape modification that may exacerbate the very problem it is intended to solve.

Taken together, these factors create a context in which many women are at risk of developing eating disorders. A neglected area of research is the precise way in which most women avoid eating disorders or having developed them, stop using them. Once an eating disorder has become established however, it appears to share many characteristics with other forms of substance abuse, encompassing a variety of intra and interpersonal functions., particularly in the area of conflict resolution. In a self-perpetuating addictive cycle the individual achieves short term relief from the distress at the cost of being in a worse predicament which requires more relief. The counterpoint to this cycle of self-intoxication is one of self-efficacy and effective conflict resolution which can be successfully promoted within the context of the family.

PREVENTION AND TREATMENT

The primary relevance of a family focus to eating disorders is in the domain of prevention and treatment, as opposed to etiology.

A. PREVENTION

While the locus of etiology in eating disorders may lie within Macro societal values, such factors are difficult to change directly. However, the impact of these values on individuals can be powerfully mediated by the microsystem of the family. A comprehensive model of prevention for eating disorders should aim at educating parents concerning early signs of potential eating problems and health promoting nutritional and exercise regimes. It should also provide models and guidelines for effective conflict resolution and the promotion of self-efficacy. This might include innoculating offspring against unrealistic societal expectations. Such preventative education could have the added advantage of preempting the transmission of maladaptive patterns through subsequent generations. While much data already exists for such preventative programs additional data should be generated by promoting research on "normal" families throughout the family life cycle.

B. TREATMENT

The benefits of family oriented treatments are multiple. They can support the efforts of medical and individual approaches. They can help the patient break a cycle of substance abuse and resolve personal and family conflicts more effectively, they can preempt relapse and provide continuity of care. Finally, they can build upon family strengths, reduce intra familial stress and in creating a context of competence, prevent further familial demoralization with its potentially deleterious effects upon other members of the familial and marital system.

Effective family treatment programs provide clear guidelines for in home behavioral management and conflict resolution. They provide a counterpoint to a frequently fragmented treatment course in which the individual patient may fall between cracks of a panalopy of external treatment resources. In addition, by defining the eating disorder problem as partially a family problem combined with clear problem solving strategies, the individual patient is destigmatized and a family crisis may be turned into an opportunity for adaptive change.

SUMMARY

There is now clear research based evidence that family focused interventions are both clinically and economically cost-effective in the treatment of eating disorders. Recent developments in family systems theory suggest that families are the ideal target for preventative programs in eating as well as other child and adolescent disorders.

Chairman MILLER. Thank you. Dr. Strober.

STATEMENT OF MICHAEL STROBER, PH.D., ASSOCIATE PROFESSOR OF PSYCHIATRY; DIRECTOR, ADOLESCENT EATING DISORDERS PROGRAM, NEUROPSYCHIATRIC INSTITUTE AND HOSPITAL, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CA

Dr. STROBER. I do not have any formal remarks prepared. I want to comment from the perspective of someone who has been involved with this problem both as a clinician working with teenagers and families; as director of a large treatment program at the University; and as someone who feels a great deal of compassion for young people and families who struggle with a condition that is as baffling to professionals as it is frightening, and which is horrifying to parents and loved ones of teenagers who are victims of this illness, as well as to the teenagers themselves.

The vital statistics have been presented. I do not feel any need to reiterate them. I want to make some comments that on the one hand underscore what has been presented and, on the other hand, suggest that we be somewhat cautious at this point in time in not accepting as fact what I consider to be observations about phenomena whose relationship to eating disorders is unclear.

Eating disorders have been known to medicine for several hundred years. References to anorexia nervosa and bulimia date back into the 1600s in the medical literature. Much of what we know has come from an explosion of research in the last two decades, and that research, along with clinical experience with teenagers, young women and their families, has substantially increased our understanding of the factors which place these young women and these young men at risk; the natural history of these conditions and their longterm outcome; and the ingredients in treatment that seem to be necessary and helpful.

They are, as was mentioned earlier, potentially chronic conditions. They produce a considerable degree of misery and psychological dysfunction in many individuals. A substantial number of people do recover, but not as many as one would like to see.

There are a variety of different treatment approaches that have been successful, particularly in the treatment of bulimia. The treatment of anorexia nervosa, however, is a long-term process, and as mentioned earlier, there is no quick remedy that brings about rapid cure or prevention; any claim to the contrary needs to be viewed with extreme caution.

Cultural factors are obviously of importance to the development of these conditions. However, we must appreciate the fact that culture is something to which we are all exposed and only a small percentage of individuals who diet and are preoccupied or dissatisfied with weight fall victim to these disorders. For this reason we must appreciate the role played by additional risk factors, those within the individual, and the family.

Dieting behavior is ubiquitous among teenagers. Virtually every teenaged girl is dissatisfied with her shape, regardless of what that shape might be. A teenager's definition of nutritional health is a soda pop and a twinkie; yet, very few teen-age girls develop the kind of condition that Krista and her mother described.

So, while cultural factors are endemic—we are a weight-preoccupied society and we have been so for many decades and will continue to be for decades to come—relatively few girls ultimately develop these conditions.

Many girls engage in dieting behaviors which seem abhorrent: vomiting, purging, and binge eating; for the most part, those symptoms are transient and are not associated with long-term hazards.

It is only in the small group of susceptible young people that these behaviors progress to the point of becoming serious clinical problems.

What is reflected in Krista's testimony is how peculiar a condition that anorexia nervosa is. Peculiar in the sense that, on the one hand, you look upon it with tremendous fear, shock, horror, outrage, or hostility; on the other hand, we feel curiosity and fascination with someone who can starve themselves to the point that we conjure up images of victims of the Holocaust, yet insist with utmost conviction that if they enter a hospital and gain five pounds, they would be grossly and horribly misshapen.

We have no idea how to understand that phenomenon. The greater puzzle in anorexia nervosa, and Krista described it well, is that it usually develops in a young woman who is plagued by self-doubt and insecurity; who cannot comprehend why they deserve the praise and admiration that they receive from others; who does not feel that they can cope effectively and independently as a teenager; who has always believed that they were deficient in some way. All this despite appearing to everyone else as poised, self-assured, capable, industrious and, in many cases, physically attractive.

In many instances it is the case that the young person felt that they could not burden their families with any expression of distress or concern because they did not feel the family environment was able to tolerate genuine expression of intense emotion.

Once the condition is active it gives the teenager a curious, but still powerful, feeling of control, fulfillment or self-sufficiency: a state of mind and purpose which, they feel, have always been lacking. There is no reason for them to feel they should give it up, and that is what Krista's mother refers to when she describes this horrible demon that is more powerful than anything and anyone, including Krista, who mistakenly believes that she is in full control of her life and in control of her diet. She is not, but she cannot give up the illusion of control because the pain of her suffering, of her depression, her self-loathing and self-condemnation, the feelings of powerlessness in the face of emotions and inadequacies, are far greater than the hazards associated with this condition—at least in her mind.

She looks at the doctor who says, "you need to gain weight; what you are doing is crazy". She looks at her parents, who say: "you need to; we are going to shove food down your throat." She is horrified that someone will attempt to take something away from her that she feels is truly life-sustaining. It is for this reason that anorexia nervosa represents a challenge to the individual, the family, and the professional whose responsibility it is to give this individual the sense that something can take the place of the horribly painful feeling of emptiness and the self-hatred.

Treatment is a slow, tedious process. It should only be undertaken by people with considerable expertise and patience in a setting with a multi-disciplinary staff who are equally well-prepared.

I want to finish by commenting briefly about what may well be a greater tragedy than the illness itself: that in this country, despite our abundance in so many areas, individuals should be faced with a potentially life-threatening condition without having access to treatment because they lack adequate insurance.

We should not tolerate individuals abrogating unto themselves the right to say that an insurance policy can exclude coverage for eating disorders; or that a family must beg to gain release of funds for extended hospital care.

I have been on the phone with insurance companies for patients who have one million dollar lifetime benefits for inpatient psychiatric coverage, but who are reluctant to authorize continuing payment despite the fact that the young woman remains ill and has a high likelihood of relapse if discharged prematurely.

Neither the family nor therapist should be faced with this kind of dilemma. So, I applaud your efforts to make catastrophic health insurance available to all individuals. We are in the position at UCLA of treating many individuals who lack adequate third party coverage. But I am on the phone nearly every day with people all over the country who want to gain admission, to whom I must say no; it should not be my responsibility to do that. I am not Solomon. I do not know how to decide who should, and who should not, be admitted.

Thank you.

[Prepared statement of Michael Strober follows:]

Prepared Statement of Michael Strober, Ph.D., Associate Professor of Psychiatry, University of California at Los Angeles, Director, Adolescent Eating Disorders Program, UCLA Neuropsychiatric Institute

Prevalence and Trends

Literary and medical accounts of self-inflicted starvation and deranged feeding in humans reminiscent of modern descriptions of anorexia nervosa and bulimia date back some three hundred years. However, recent research suggests a rising incidence of the disorder in the U.S. and in Europe during the twenty year period from 1955-1075. Moreover, anorexia nervosa may occur on a continuum of severity making less extreme cases difficult to detect among the great majority of adolescent dieters. Several aspects of the epidemiology of anorexia nervosa are reasonably well established: (1) modal age of onset during adolescence; (2) a greater female to male ratio among affected individuals; (3) over-representation in caucasian middle and upper social classes; (4) a lifetime prevalence in the population of 0.5% to 1.5%. Less is known about the epidemiology of bulimia, though its lifetime prevalence may be somewhat greater, ranging from 1.5% to 4%.

Social class phenomena believed to heighten risk among vulnerable individuals include competitive achievement standards, attitudes toward emotional expression and sexuality and familial influences on the development of self-esteem and psychological autonomy.

Risk Factors

Most current theories favor the view that anorexia nervosa and bulimia are complex, multiply determined conditions. Specific elements in their etiology are as follows:

1. Personality. Research is consistent in describing such traits as compliancy, emotional reserve, compulsivity, and restraint, coupled with self-doubt and low self-regard, in patients with anorexia nervosa. These traits persist even after normal body weight is restored. The personality of bulimic individuals appears to vary quite widely, although traits of self-doubt and impulsivity have been described with some consistency.

2. Family environment. The family environment appears to hamper the development of a stable identity, of autonomy, and of freedom of emotional expression through a cluster of disturbed patterns of relating: poor conflict resolution, emotional overinvolvement or detachment, lack of expressed emotion, or enmeshment. Bulimia tends to be more strongly associated with hostile and disengaged patterns of family interaction, and increased incidence of familial alcoholism and obesity.

3. Other psychiatric disorders. The presence of depression may increase risk to eating disorders, but only if other risk factors are present.

4. The transmission of illness. For reasons that remain poorly understood, eating disorders also appear to run in families.

Theoretical paradigms

1. Biological. These approaches stress pathologic changes in hormone output and biochemical influences on feeding behavior. However, no primary biological cause of eating disorders has yet to be identified, and many physiologic abnormalities are clearly secondary to effects of starvation, binge eating or purging.

2. Cultural. These emphasize sociocultural preferences towards a thinner, preferred body shape in women. A greater incidence of eating disorders among women who experience occupational pressure to remain thin supports the role played by cultural variables.

3. Psychological. Currently favored by most authorities, this approach views anorexia nervosa and bulimia as starvation induced, biologically abnormal states that help to avoid or cope with deeply rooted emotional problems concerning identity and self-esteem. In this regard, the control of body weight is experienced as a means of restoring self-worth and compensating for other perceived inadequacies.

Course and treatment

Anorexia nervosa is frequently a chronic illness that proves resistant to treatment, especially if intervention is delayed. Mortality averages 5% in studies published during the past 20 years, and some 15% remain acutely ill for many years after the first appearance of symptoms. Roughly 50% of patients are judged to be recovered 5 to 10 years after illness onset; another 30% have intermediate levels of impairment.

There is a consensus among leading authorities that the treatment of anorexia nervosa requires the restoration of body weight in conjunction with individual and family therapy aimed at areas of personal and family-wide conflict. The treatment requires time, patience, and specialized expertise, as treatment undertaken under less than ideal circumstances can be detrimental.

Chairman **Miller**. Thank you.

Again, let me thank all of you for your testimony.

Congresswoman Boxer was just whispering in my ear that all of the witnesses have just been fantastic today and I want to thank you at the outset.

If I am hearing this correctly, what I think I start to see is two things going on. Dr. Strober, what your testimony and Dr. Killen's testimony brought home is a lot of discussion on dieting working at cross purposes with what these individuals and their families may think they want to achieve in terms of a body image, of the ideal weight, whatever that is, and then, a separate track is the discussion that there may be a personality that is susceptible to taking this as a means of dealing with other problems.

Are these two things absolutely intertwined or are they somewhat separate? If we just look at the pervasiveness of—I have not developed my vocabulary properly here—proper weight consciousness, that is not going to solve the problem in and of itself.

By the same token, to suggest that this is nothing more than a manifestation of underlying family problems does not appear that it is going to solve the problem. Am I close to correct here in terms of saying that we have two forces that at some point seem to—the vectors just seem to cross and you match up a child and/or a family and a consciousness of weight and appearance.

Am I making any sense? Do not be afraid to say I am not.

Dr. **Killen**. Eating disorders would seem to arise from a complex interplay of factors. We really don't understand the etiology very well and we are in need of longitudinal studies that identify the important risk factors.

One of the reasons that I really wanted to be here was to emphasize the need to provide funding for this kind of research. There is not enough research which examines potential psychological, behavioral and environmental risk factors in longitudinal study designs.

Chairman **Miller**. Well, Mr. Moley brought out the point that there are millions of young people and families that successfully negotiate their way around this. They assume that the children in those families have the same consciousness about their body as they are growing up or the desire to achieve that image and also have a series of problems going on in the family, yet this is simply a manifestation in another fashion—you are both talking about research.

Dr. **Killen**. Well, I think he made the point, too, that we should be spending more time studying healthy families. There are analogies in other fields of research. For example, you are probably aware of the millions of dollars spent on trying to understand how to prevent cigarette smoking. We are now only beginning to realize that successful quitters may have something to teach us and to study successful quitters in meaningful ways.

Mr. **Moley**. I think part of the confusion is that the term eating disorder covers a very broad range of different sort of behaviors and problems. I mean, the one extreme is people near death and is really very serious, but you cannot actually give the same diagnosis of bulimia to somebody who occasionally binges and experiences psychological distress as well as someone who is binging and purging ten times a day.

So, I think the diagnostic criteria needs to be cleaned up a bit because clearly there are some people who are at death's door and extremely distressed and in need of very intense medical and psychiatric in-patient care who are not getting it, but then there are other people where it just is not necessary because they are just not at that high risk.

Ms. **Zimbelman**. Or maybe that you would categorize as bulimic-like or anorexic like in terms of that they are obsessing with their food, dieting and/or exercise and yet not vomiting. So, we have terms for them as bulimic-like because that is much different than somebody who is binging and purging ten times to fifteen times a day for nine years.

Chairman **Miller**. And, Dr. Strober, you are telling us that the notion that an anorexic may be out of control, for the anorexic it may be exactly the opposite.

Dr. **Strober**. I am sure that Krista felt that she was perfectly able and entitled to do what she was doing; that she could successfully regulate her weight, at least early on. In the twelve years I have been involved in this work I have never heard anyone say that they started to diet for the purpose of developing anorexia nervosa, or to weigh sixty pounds. The majority of patients that we see at UCLA who weigh fifty to seventy pounds, say, that if they knew what agony they would have suffered, they never would have started a diet. Never.

She believes mistakenly that as she sheds her pounds and feels a tremendous uplift because of this she is distracted away from some awareness of her emotional troubles, but, in fact——

Chairman **Miller**. Let me just interrupt because I am not sure I understand.

I guess that is what I am asking. The notion that this is consciously taking place while she is dwindling away, that for that individual it is a question of her being in charge and accomplishing some things that she wants to accomplish.

Dr. **Strober**. She believes that. She feels that. To a degree, she is, but in reality her anorexic state is perpetuated by the biological effects of starvation. Nonetheless, Krista feels it is the first time that she has been able to make a statement; as Krista and her mother said, a statement that has mobilized the family, and mobilized herself to tackle problems that are significant and which need to be rectified if she and her family are to live a productive life.

That is why anorexia nervosa, as horrifying and destructive as it is, is a state which is valued by the individual; something that the person who is treating the family and the individual must embrace, as curious as that may sound. You must have a certain respect for this condition and the function it serves for the patient.

If you look upon it with scorn, take the approach that it is harmful and must be eliminated as quickly as possible, the patient will walk out of the office and refuse treatment. And they should do so immediately because that individual does not have an adequate understanding of how truly complicated a condition this is.

Chairman **Miller**. Dr. Steiner, you talked about a doubling of your caseload in six years. More episodes or—we go through this quite often—people are just more willing to come forward and ask for help?

Dr. STEINER. Well, that is essentially the big question that we have, too. Our program is a younger one than Michael's is. At UCLA, it has been long-established. In part, our growth represents simply a consolidation of our program.

We also think that these patients are more willing to come forward, there has been more press, there has been more education of other doctors. It used to be quite common in our clinic that we used to have patients walk in after being ill for two or three years and we would question the parents and say, now, how could this go on for so long. They would say, well, we took her to a pediatrician, he took a urinalysis and he told us that that was normal, and then he would send her home, and he said for her to put on some weight. That was it, and, so, there were periodic visits to doctors and nothing ever was suggested in terms of what one could do.

That scenario has become much less common and we are very active at Stanford in trying to reach the pediatric community and the rest of the medical community. I think that is another area where the public sector can help, to educate them about this kind of issue.

Chances are if you are a run-of-the-mill pediatrician or a G.P., general practitioner, you will have seen maybe one or two cases like this in your training ever, and doctors hate to be wrong. Everybody knows that. So, if there walks in a patient, they do not really know what to do for that person, but that is not what they say. They say, well, I know what it is, and I am just going to wing it with a recommendation to put on some weight. What is wrong with you anyway, why can't you just eat the triple hamburger at McDonald's. You get this no nonsense type of approach that is alienating and infuriating, just like Michael suggests.

I think what the patient should do at that point is walk out of the office and say this is it. Now, that has become much less common, thank goodness, and now we see a lot of patients who actually are just in their first few months of anorexia and it makes a tremendous difference in terms of facilitating contact with a kid, with a patient and the parents and getting the treatment program started. It is a lot easier. Whether we ultimately have some impact on relapse prevention and overall outcome, that is not certain, but for sure it makes the whole treatment program, the establishment of a reasonable treatment program much easier.

Chairman MILLER. Congressman Coats.

Mr. COATS. I would like to pursue an area that came up in the written testimony of a couple of the panelists in the first panel, and I think, Linda, you mentioned it also, and that is the relationship of these eating disorders to earlier physical or sexual abuse.

Would any of you want to elaborate on that? We have not really gotten into that and I am just curious as to what the degree of incidence is and the connection. Do we know enough to make that conclusion? Can any of you?

Dr. STEINER. We have some data on that. They are gathered prospectively on all new patients that come in. Part of the routine assessment is a fairly detailed questioning about the occurrence of what we call unauthorized sexual acts.

If you use that kind of a definition for sexual abuse and molestation, then what we get in our sample is roughly a third of the patients report such occurrences, ranging all the way from inappropriate touching to actual sexual intercourse.

It tends to be more frequent in bulimic-type patients than it is in anorexia-type patients. What that means, we do not really know.

I only know of one other study that looked at that systematically and they had a similar percentage of their patients who reported this kind of thing.

Ms. **Zimbelman**. Also, with the hospital I work with, they are reporting as much as eighty-five percent of their patients, which is the Delamo Hospital in Los Angeles, have been sexually abused. That being what the doctor just said, could be all the way to molestation, repetitive molestation, rape, and any form of sexual trauma.

The person feels so tremendously guilty and has had to suppress it for such a long time that it manifests in the eating disorder and another way in which they investigate this is through amneotal interviews which is where they—I do not know—the other doctors, I am sure they are very familiar and maybe a doctor from UCLA can talk about that, in which they go back and they track exactly when it happened.

So, through the interviews, a great deal of information that has been suppressed for so long comes out and must be dealt with and can traumatize the entire family system.

Mr. **Coats**. Dr. Strober, what is your experience with that at UCLA?

Dr. **Strober**. I have a somewhat different perspective on it. Clearly there are women who have been sexually victimized or physically abused prior to the onset of their eating disorder, and this is a factor which is conducive to, or precipiates the illness.

However, the statement that 40 to 70 percent of women with eating disorders have prior histories of sexual abuse is exaggerated. The incidence is a function of the population and location of treatment. Some treatment centers have a well known expertise in the treatment of individuals who have been sexually traumatized and, consequently, individuals are more inclined to seek out assistance at such a facility.

In our experience with teenagers, who we follow prospectively, and with whom we have very intense involvement, the incidence is actually lower than the average rate in the general population.

So, I would urge that we exercise some caution in interpreting a link between sexual or physical abuse and eating disorders.

Mr. **Coats**. Mr. Moley, you talked to us about family intervention and preventive programs. Can you translate that down to something more specific? If we are going to institute or get involved in some type of family education or family prevention-type program, what specific things would we be looking at?

Mr. **Moley**. Well, I suppose there is a number of sort of entry points. I think Dr. Steiner's point is a good one, to educate primary care and other physicians, family physicians, on early detection of the problem because it seems easier to deal with if you get it earlier on.

Mr. **Coats**. Teachers in schools?

Mr. **Moley**. Teachers in schools. I think also through churches. A lot of people, when they first begin to experience distress, will go to some member of an organized religion, some sort of information there or some information packets, so they can be rapidly getting some sort of appropriate and informed help.

But the reason I mentioned—one thing that seems—I am trying to de-emphasize pathologizing families because I think that mothers particularly have got a lot of bad press. I mean, they have sort of been blamed for schizophrenia and everything else, but it does seem clear that while it is maybe inaccurate to blame families for the causes of a lot of psychiatric and other problems because they are multi-factorially determined, that families can make a profound impact upon the cause and the outcome of a range of even very severe psychiatric syndromes, such as schizophrenia, and there is good research evidence as to what factors within a family seem to maintain the problem and which ones seem to change it.

A lot of them seem to have to do with the area of conflict resolution and more effective conflict resolution, and I think one interesting idea would be, you know, we see, say, on the media, representations of forms of conflict resolution that are rather costly and it might be an interesting idea as one of the speakers suggested this morning to sort of have families on public television or other media demonstrations resolving conflicts effectively, in which people can pursue mutual self-interests in a way that is non-destructive and intimidating, so that would be one.

But I would think any entry point that you have, through schools, physicians, media, if you can get it, religious organizations, things of that, because it does seem that however eating disorders begin in the—also, I think you could have a preventive program just giving better education about the noxious aspects of excessive dieting at that level that may head some people off.

But I think it is—the main thing that needs to be done apart from that, I think, is before rushing in where angels fear to tread is to have some good data upon how adaptive normal families do, in fact, successfully resolve conflicts and I think it is wise to do a little more research on that before sort of preemptively jumping in on it.

Mr. **Coats**. Certainly, I guess, we have identified the major contributing cause as the societal trend toward equating success with physical attractiveness, success with thinness, particularly in women.

Is there any evidence that this is starting to change, that we have come through a cycle now, are we just still struggling down that path?

Dr. **Steiner**. I am not sure anybody is seeing that. In other words, if we did a follow-up study on Miss America and Playboy study——

Mr. **Coats**. They do not give the measurements of Miss America anymore like they used to.

Dr. **Steiner**. I wish I had thought of that one. So, as far as I know, nobody is doing anything. I do not think it has turned around. It has eased up a little bit. I have sort of my own informal poll. I go every week to pick up my magazines at a newsstand and I always look through the teen magazines to quickly scan for the latest description of some dietary practice that might help you do this, that or the other.

My impression is that it has eased off, but——

Mr. COATS. The reason I thought of that is there are several things. My daughter, I have a teenage daughter, has these fashion magazines and I noticed the title on the latest one this month is "Voluptuousness Is In".

Chairman MILLER. I refer to it as Rubenesque.

Mr. COATS. The gaunt look is out, which was in at one particular time. I am just wondering if we are moving in the direction where some of the role models for women are—well, Lady Di—I should not get into this area.

Chairman MILLER. You can get into a lot of trouble, a lot of trouble.

Mr. COATS. Well, let us hope that we are moved away.

Ms. ZIMBELMAN. I think that we have some new role models, like you just said. Our First Lady is at the other end of that spectrum. Yet we see our numbers going up, you know. They are saying that we are turning towards a more voluptuous body image and, yet, it is just talk. I mean, we do not have any research on that. We still see our numbers rising.

Mr. COATS. I think I will stop there, Mr. Chairman.

Chairman MILLER. Congresswoman Boxer.

Mrs. BOXER. Yes. Just two, I hope, quick points.

When we talk about prevention and we, with the help of the Chairman, have had a series of hearings on AIDS in children and so on, and we look at high-risk groups as a way so that we do not—we want to get to a group, we do not waste a lot of money and a lot of time, we try to hone in.

If you could tell us, we have heard bits and pieces, is there such a way to categorize people who are apt to get the serious form of eating disorders, what would be the risks?

Dr. STROBER. Well, the best way to characterize it would be to sit down for several hours with Krista's family because she epitomizes the individual at greatest risk for developing anorexia nervosa, which is not to mock or condemn her, or to cite her as an example of pathology.

But Krista, very clearly and succinctly describes what it is within the personality of the individual that seems to place someone at risk. A certain kind of sensitivity and compulsivity, a difficulty in the outward expression of emotion, a tendency to be somewhat introverted and to internalize; not a risk-taker, but someone who is restrained, who feels inadequate, with low self-regard; and a family environment that has equal difficulty in fostering or tolerating direct emotional expression, but a family environment that may, nonetheless, be very caring and loving.

Mrs. BOXER. So, the risks are certain traits within an individual, they are not risks that you can say it is this particular age, it is this particular culture, it is this particular economic group? It is children of divorced parents, it is this. In other words, it is more a risk due to the internal make-up of the individual and the circumstances.

Dr. **Strober**. There are particular individuals and particular families that interact in such a way as to sensitize the person to these cultural messages more so than other individuals.

Mrs. **Boxer**. Does anyone have anything to add to that?

Dr. **Killen**. Our data indicates that some of the behaviors and characteristics which may be precursors of eating disorders are occurring during early adolescence.

I would stress and urge again that if we think in terms of broad-based prevention, that we need to develop educational programs for children and adolescents that emphasize healthy weight regulation and Social influence resistance training.

Dr. **Steiner**. I think that the kind of things that Michael was talking about, the subtle characteristics to pick up. I mean, this is not something that hits you over the head, that you can pick off a demographic data sheet. That is the problem with anorexia.

I am sure anybody that had looked at Krista several years ago would have never guessed that this would happen, and I am not sure how many of us would have guessed either. So, these are very, very subtle variables that I am unsure, currently, with our current amount of knowledge, really can be approached in a preventive kind of way.

I think what really needs to happen next is that somebody will do a large scale prospective study of kids, from about eight-nine on and follow them for the next six-seven-eight-nine years and then see which one of them develops eating disorders by the time they are sixteen and then you go back to your initial data base and you see what were the factors that would have predicted that they would get anorexia. I do not know of any such study.

The other point I feel is very important is that the best we can do these days is to educate people a lot about what dieting and what exercising and those sorts of things will do to your mental health, not just to your weight. That is—people have totally focused on the benefits of dieting and you always smile when people actually lose pound after pound in the advertisement but nobody talks about the fact that any time you diet, you take a significant risk of developing a problem.

So that would be my pitch in terms of how to approach prevention at this point. We have some studies now that when we follow anorexic, formerly anorexic patients who have become pregnant and are feeding their infants now, in the first few months of life, and we are trying to get some clues from them what there is, if anything, about them feeding infants that is peculiar, that is different.

We have studied several women and it is again clear that there is something going on but it is not easily picked up and we will just need a lot more data.

Mrs. **Boxer**. Mr. Chairman, I would just like to make one more point. If I am wrong on this, please tell me if I am wrong on this, because I have learned a lot and I cannot thank everybody enough who has participated.

Would it be right to say that serious eating disorders, by that, we are talking about the kind that Krista talked about where we see kids' lives being threatened, that serious eating disorders are a result of some basic mental health problems, usually coming out of the family, which are encouraged by society's stress on thinness?

I mean, is that a statement that has more truth than not?

Dr. **Strober**. I would qualify it in one way.

Mrs. **Boxer**. Wait a minute. Okay.

Dr. **Strober**. I would qualify it in one way to be completely fair to the families. I believe it comes out of an interplay or inter-action between personality traits that are unique to the individual, and the family environment in which that individual is raised. We commonly assume that everything about our personality is a function of the environment in which we are raised; that is not true. There is very good, unequivocal evidence that not everything that goes into personality is a product of your immediate environment, that one's temperament and genetic background are very important services of personality.

Dr. **Steiner**. There seems to be some form of biological vulnerability in these patients. We cannot characterize it yet, but most of us in the field think that this whole set of circumstances hits upon somebody who is vulnerable in a way that probably has nothing to do with how mom and dad did. It has a lot to do with your genes.

Mr. **Moley**. Yeah. If you extend that analogy, you could see the family as sort of constituting a potential immune system and what you need to do is strengthen the immune system because there may be nothing you can do about the biological propensity, but the family can make an impact of a positive nature.

Dr. **Strober**. I have also seen families who have turned out to be absolute disasters: unable, and in some cases, unwilling to provide for their child in a healthy way, yet the kids flourish with treatment. So, we should not underestimate the power of an individual in the face of seemingly incredible adversity. It works both ways.

Mrs. **Boxer**. Thank you, Mr. Chairman.

Chairman **Miller**. Let me just ask Dr. Strober. In your written statement, you outline risk factors and theoretical paradigms.

How differently should we view this in the totality from other behaviors of adolescence and in drug abuse, alcohol abuse, or suicide?

Dr. **Strober**. Well, in that sense, I do not think it should be viewed differently at all. All major psychiatric behavioral syndromes are probably multi-factorial, that you need a—you do not develop it unless you have input from many different areas and then if you focus selectively on one dimension to the exclusion of another, you are going to miss the point both with respect to understanding the nature of these conditions and their treatment. There is certainly ample evidence of that in the literature.

Chairman **Miller**. Is there some distinction that could be drawn because there is some positive reinforcement as to what is the presumed end here in the sense of weight loss, thinness, enhanced beauty? Now, there may be some positive reinforcement within the sub-culture in drug abuse or alcohol use because it also in theory, because of PR, it gives you, you know, a different look if you are a beer drinker, a different look if you use drugs or what have you.

I mean, in that sense, there is something culturally, I guess maybe in all of these, although suicide——

Dr. **Strober**. I think you are right and that is why in many respects the development of this is much more insidious than anything, if you have somebody that says, I went to a party and tried cocaine—that is bad. But if someone says, I lost a couple of pounds, they may be patted on the back.

Chairman **Miller**. So, in terms of psychiatric dysfunction, though, we should start to look at this as that sort of unfortunate basket of behavior that is engaged in by adolescents when they run into problems or their family runs into problems. It is not that different.

Dr. **Strober**. No, I do not think it is different in that sense. It is significant and serious. It does indicate significant difficulty at many different levels. In that regard, it is like other kinds of adolescent problems.

Chairman **Miller**. Well, if Dr. Steiner's figures are right, it is every bit as serious as what we immediately equate with destructive, bad, illegal, if you will, behavior.

Dr. **Strober**. Well, I would actually argue that it is more serious because the treatment of conditions like drug abuse and alcoholism is much more straightforward and effective than the treatment of anorexia nervosa.

Chairman **Miller**. In the lack of support within the culture, you mean, or just in dealing with the individual?

Dr. **Strober**. The nature of the condition, and the extent to which it is persistent, this is the only condition in psychiatry in which the individual has a vested interest in perpetuating the condition; where an individual will declare, I am not giving this up because it makes me feel good.

Chairman **Miller**. Any other questions? [No response.]

Thank you very, very much all of the witnesses for your time and your help to the committee. We appreciate it a great deal. Again I want to thank my two colleagues for taking their time to make this hearing possible and thank you to all of the staff here at Marshal Hale Memorial Hospital for all of the support help that you have given the committee, and thanks to all the committee staff for all the support they have given the Members.

[Whereupon, at 12:59 p.m., the committee was adjourned.]

[Material submitted for inclusion in the record follows:]

ADOLESCENT OBESITY

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The recent national concern about adolescent obesity, including an NIH workshop[1], congressional hearings and media attention, stems from a variety of origins. First, it emanates from the recent recognition that pediatric obesity has increased dramatically in the last fifteen to twenty years. Gortmaker, Dietz and colleagues[2] analyzed nationally representative data and found that obesity in adolescents increased 39% and that it affects 21.9% of 12- to 17-year olds. Second, since obesity in adults is refractory and intractable, prevention appears prudent. Third, of stages within the pediatric population, obesity has been associated with the greatest risk of persistence of obesity into adulthood.

Summary of Adolescent Obesity

Obesity in adolescence is distinct from obesity in other life stages in that the psychosocial and biological changes heralded by puberty profoundly influence obesity care. For instance, an adolescent's stage of sexual maturity influences the assessment of body fat. The degree to which the adolescent has separated from the family directly influences the extent to which parents should be involved in the adolescent's treatment.

The etiology of adolescent obesity is diverse and multifactorial. Although the initial weight gain may be caused by a singular factor, the increase in adiposity itself typically induces other changes that contribute further to weight gain. The adolescent is often caught in a downward spiral of inactivity, overeating, social isolation, depression, low self-esteem and weight gain.

Genetic factors appear to influence body weight, with recent data from analysis of adoptees by Stunkard[3] supporting the role of genetics in human obesity. Other data as summarized by Garn[4] reveal the variability of weight throughout the life cycle, supporting the role of environment. Although the precise role of genetics is not well understood, it is believed that genetic factors are important and yet environmental factors serve an important role in mediating body weight.

Organic conditions cause obesity in fewer than 2% of cases. These rare conditions, such as Prader-Willi Syndrome, Turner's Syndrome and Frolich's Syndrome are associated with short stature or growth problems, and are an indication for evaluation by an endocrinologist to rule out endogenous obesity. Certain medications and medical problems such as asthma, diabetes and orthopedic problems can contribute to obesity in youth.

Family variables are believed to be central to the causation of obesity in adolescents. Although the family's etiologic roles genetically and behaviorally have long been appreciated, recently the role of the family system in the development and maintenance of the obesity has received recognition. For instance, Harkaway[5] describes the functions of the symptom of excessive adiposity in the families, such as protecting the family boundaries through delaying the child's development and emancipation, serving as a method of getting parental attention especially when the parent is depressed or suffers a loss, providing a distraction from more serious or painful family problems or conveying an affirmation of family loyalty or membership in an obese family.

The family of the obese adolescent may be more likely to be dysfunctional[6]. The family may be enmeshed with parents who are overprotective and overinvolved. On the other hand, the family may be chaotic and lack the structure to meet the adolescent's needs for nurturance and support. Parenting styles affect weight in that difficulties with setting limits, providing a warm, nurturing environment and communicating openly and effectively can contribute to the development of obesity and can be a barrier to treatment success.

Little is known about the role of psychological variables in the onset or maintenance of adolescent obesity, although psychological problems in other age groups are not associated with obesity. Limited data do suggest, however, that obese adolescents may have a more negative self-concept and lower self-esteem and may be more depressed, although these differences may be consequences rather than causes of the obesity.

Contrary to popular belief, obese adolescents do not appear to consume more calories than their non-obese peers. Both longitudinal and cross-sectional studies suggest that the obese consume the same or fewer calories than the normal weight. However, most studies rely on self-report rather than observation. The primary distinction between the eating behaviors of the obese and non-obese is the frequency of eating, with the obese more likely to skip meals and to eat less frequently. It is unclear whether this distinction is a cause or consequence of the obesity. Studies suggest that restrictive dieting, binge eating and emotional overeating are common in adolescents in all weight categories, and some conclude that the obese are more likely to engage in these behaviors.

The obese adolescent appears to be significantly less physically active and less physically fit than the normal weight. This may be related to the poor and declining physical fitness of the nation's youth[7]. Television viewing, a sedentary activity, has also been implicated in the causation of obesity. In adolescents the prevalence of obesity increases two percent for each hour of television viewed[8].

The Disadvantages of Adolescent Obesity

The disadvantages of adolescent obesity are often severe. From a health perspective, the major risk is persistence into adulthood. Seventy percent or more of obese adolescents will become obese adults. Adolescence appears to be a pivotal time in determining adult fatness. Even if the obese youth normalizes weight during adulthood, having gone through adolescence in the obese state may increase risk of hypertension and body-image distortion. The immediate health risks of adolescent obesity include increased risk of hyperinsulinemia, hypertension, hyperlipidemia, and respiratory and orthopedic problems. In addition, growth and development are affected by obesity as obese adolescents enter puberty earlier and have a shorter period of long bone growth which results in an adult stature less than the individual's genetic potential.

The psychosocial risks and disadvantages of adolescent obesity are often severe. They may be delayed in their psychosocial development, perhaps a consequence of peer discrimination or a family system that discourages emancipation. Obese adolescents are more frequently discriminated against by peers, parents, teachers, and employers. This prejudicial treatment appears to contribute to a more negative self-concept and body image disparagement.

Adolescent Obesity Treatment

Until the last five years treatment for adolescent obesity has demonstrated poor effectiveness[9], with most adolescents dropping out of the intervention and virtually no approaches demonstrating long-term effectiveness. Due to the increased prevalence of adolescent obesity and the heightened interest in prevention of adult obesity, a broader range of treatment options has recently emerged.

1. **High-risk treatments.** Very low-calorie diet[10] approaches to adolescent obesity treatment have been shown to be ineffective and hazardous, significantly decreasing lean body mass and growth velocity[11]. Surgical approaches have shown significant mortality, morbidity and recidivism[12].

2. **Commercial programs.** Summer camps and commercial diet programs offer obesity interventions to youth. Camps are costly and stress excessive weight loss. Commercial diet programs typically focus on nutrition exclusively and recommend rigid or overly restrictive diets. The primary disadvantages of commercial programs are that they include no significant family intervention or follow-up care, focus excessively on diet and exercise, may be nutritionally inadequate and involve lay staff who are often insufficiently trained in the biopsychosocial aspects of adolescent obesity. Recidivism and drop out rates with these approaches are excessive.

3. **Comprehensive low-risk programs delivered by health professionals.** Although low-risk programs in general continue to report poor outcomes, highly developed, comprehensive weight management programs conducted by health professionals have shown impressive short- and long-term effectiveness. One of these programs is the SHAPEDOWN Program[13], developed at the University of California, San Francisco. Another is the LEARN Program[14] developed at the University of Pennsylvania. These interventions promote long-term changes in weight, blood pressure, diet and exercise behaviors, self-esteem and knowledge. They share these characteristics:

a. Comprehensive assessment. Because of the diversity of causes and consequences of adolescent obesity, the obesity should be comprehensively assessed prior to treatment. Biological, behavioral, psychological and family interactional contributors are identified and the possibility of organic obesity should be assessed. The interventions are capable of being individualized to meet the needs of the family and adolescent.

b. Nutritionally protective. During this sensitive period of growth and development, adequacy of the diet consistent with U.S. Recommended Dietary Allowances and the U.S. Dietary Guidelines must be ensured. Food avoidances or severe restrictions are avoided. Weight loss averages no more than one to two pounds per week.

c. Physical activity. Because of the beneficial effect of exercise on weight loss and health, physical activity is a core component of the programs. Lifestyle exercises that have the potential to be continued in adulthood are emphasized.

d. Extensive family intervention. Extensive, separate parent sessions have been shown to be critical to the long-term success of adolescent obesity interventions[14]. Sessions focus on family changes in diet, exercise and lifestyle changes as well as family communication, interaction and attitudes.

e. Pyschologically beneficial. These approaches enhance self-esteem and improve body image. Techniques that are potentially psychologically distressing such as aversion therapy and rigid or restrictive diets are avoided.

f. Coordinated with health care. The adolescent obesity intervention is coordinated with medical care. The physician assesses the adolescent's health prior to the intervention and monitors health indices during treatment. Other health professionals are available to the adolescent and family, including a mental health professional, registered dietitian and licensed exercise physiologist.

g. Long-term follow-up care. The maintenance of lifestyle, diet and exercise changes often require continued support for an extended period. Availability of supportive counseling is available to the adolescent and family for at least one year after the intervention.

Summary

The prevalence of adolescent obesity is increasing at an alarming rate. Obesity during adolescence is likely to persist into adulthood. The etiology and consequences of adolescent obesity are diverse, necessitating a biopsychosocial assessment process[15] and a comprehensive, individualized care approach to treatment.

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NCA

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August 12, 1987

U.S. House of Representatives
Select Committee on Children, Youth and Families
385 House Office Building Annex 2
Washington, DC 20515

RE: Statement for the hearing record relating to "Eating Disorders: The Impact on Children and Families"

On behalf of The Ad Hoc Interdisciplinary Committee on Children and Weight, which is made up of health professionals who have dealt with children with weight problems for many years, I wish to commend the Select Committee for holding these hearings on eating disorders as these are problems which can be major disruptive factors in families.

As a group, our committee has been studying the problems of obesity and eating disorders since 1983. Our concerns started with obesity in children as it relates to the preoccupation of the American society with thinness as well as the increasing prevalence of anorexia nervosa and bulimia.

We are convinced that eating disorders are a manifestation of a wide spectrum of problems, some of which include aberrant ways in which people use food. The resulting health problems can be obesity, bulimia or anorexia. We are especially concerned with the need for parents to increase their skills about how as well as what to feed children and how to keep eating and feeding from becoming problems. We strongly recommend that the Select Committee view eating disorders in a broad context because the adverse effects of overweight and obesity in children are as devastating if not as immediately life threatening as anorexia and bulimia.

A copy of the position paper, "Children and Weight: A Changing Perspective," is attached. It summarizes the findings of the Ad Hoc Committee and provides background to help health professionals and others who work with children to recognize the importance and complexities of the problems and to address ways to prevent these problems. Our committee recommends that the following actions should be taken:

1. Expanding the approach to weight control problems from a single focus medical model to a multidimensional approach that would include:
    a. Addressing psychosocial factors.
    b. Improving diagnosis of obesity and eating disorders.
    c. Improving health care practices to monitor, prevent, and/or correct problems of obesity and eating disorders.
    d. Developing intervention goals that recognize individual differences and help the individual acquire the knowledge of how to develop his/her best growth and development potential.

2. Fostering changes in individual and societal attitudes and behavior to accept a wider and more realistic range of body sizes.
3. Encouraging and supporting actions by agriculture, food industry, and restaurants to provide food choices that help consumers meet individual energy needs in our society of abundant food supply and limited energy expenditure.
4. Expanding opportunities for parent education on how to feed as well as what to feed children.
5. Promoting a variety of physical activities for children of all shapes and sizes as a regular part of their lives.
6. Continuing research to provide a base of knowledge on which preventive as well as treatment action can be developed.

These recommendations are elaborated in further detail in the last chapter of the position paper. We also call attention to the objectives and activities for preventing obesity in Table 5, page 15. These are activities which could prevent many forms of eating disorders. We strongly recommend that many of the actions which been outlined should be implemented in government programs. Some of these recommendations will require legislative action.

If we can be of further service to the Select Committee, please call upon us. You may contact the Ad Hoc Committee through me at Nutrition Communications Associates, (415) 843-7572.

Sincerely,

Helen D. Ullrich

Helen D. Ullrich, M.A., R.D.
Owner/Principal
and
Co-author of "Children and Weight: A Changing Perspective"

Enc. Position paper

[Article entitled "Children and Weight: A Changing Perspective" is retained in Committee files:]

Children and Weight: A Changing Perspective

As identified by

Ad Hoc Interdisciplinary Committee
on Children and Weight

Written by Eileen B. Peck, Dr.P.H., R.D.
and Helen D. Ullrich, M.A., R.D.

Summary of the Paper

Introduction and Issues of Concern

Professionals working with children and parents alike seem to be reinforcing today's popular message in our society that "fatness is ugly at any age" and "thinness is in." The problems resulting from pressures on children and adolescents to conform to this image have prompted the writing of this paper.

As a committee, we identified three issues which reflect our concern about the current attitudes about children and how their growth and development is perceived in relation to weight. These concerns are 1) our society is overly concerned about body size and conformation to a slim image; 2) individual needs of the child are often not adequately considered; and 3) in current health practices, interventions are sometimes overly aggressive and focus on a single aspect of the problem, usually diet.

Infants are also victims of societal trends. The current practices create a situation which is confusing for parents and health care professionals, not to mention the children. Until fairly recently, the general belief in this country has been that a plump baby is a healthy baby. There still exists in segments of our culture the belief that infant overfeeding is healthful. There is a simultaneous effort to reduce the incidence of obesity in babies because of concern they may become obese adults despite mounting evidence that the obese infant is not destined to become an obese adult.

A relaxed, nonjudgemental attitude toward the child and his/her future development, whether at the 90th or 50th percentile of weight for height, will help assure the best physical and emotional growth potential for that individual. However, this is not the current practice nor is it easy to achieve.

Some clues from current knowledge about children, how they grow, and how they become candidates for obesity can be mobilized to help these chldren at an early age. Certain actions can be safely recommended and promoted which will prevent and/or help alleviate these problems.

Factors Related to Normal Weight and Variations from It

Children grow at very different rates during any age period and variations between slow and rapid growth do not necessarily indicate abnormal growth. The relation of lean to fat tissue in the body varies for boys and girls at different ages. Normally, girls tend to increase body fat throughout adolescence while boys do not. Sometimes children who are overweight have no excess body fat due to heavy musculature and body frame.

Obesity is defined as excess body fat. The degree of obesity is usually identified by the percentage of weight above a designated norm for height, weight, and age. Obesity has been classified by various researchers in relation to fat cell number and size, age and degree of severity. These classifications are generally useful for identifying treatment approaches to obesity.

It is difficult to measure accurately percentage of body fat. However, the National Center for Health Statistics (NCHS) growth charts provide an adequate guide for children up to adolescence when used with other health assessments. A method has been suggested to assess the height-weight relationships in adolescents which has proved useful in clinical practice. The skinfold (fatfold) measurement using calipers can provide a more direct measurement of fat tissue. However, the difficulties of standardization of the technique is a major shortcoming.

Possibly the greatest health hazards to the obese child are psychological and social. The relation of childhood obesity to physical health risks is not clearcut. Inappropriate weight control interventions for children during demanding growth periods may be particularly hazardous. However, the risks of the obese child becoming an obese adult increase with the degree and duration of obesity. The 26-year follow-up the Framingham Heart Study shows that for obese adults the risk of health problems such as heart disease is much higher. When obese adults enter cycles of weight loss and regain, there may be additional health risks.

While the prevalence of obesity in children has been reported at 10 to 12 percent in preschool age through adolescence, there are different patterns. There seem to be some children who become progressively fatter and others who vacillate between the obese and nonobese state. However, most fat infants do not become fat children. Impending or actual obesity often begins between the ages of six and nine years with some predictability as early as two years.

It is well-established that the probability of fatness is directly related to the level of fatness in other family members. While the fatness characteristic is strongly familial, it is not necessarily genetic. With strong evidence that it is the family relationship which influences relative development of obesity whether because of genetics or family practices, any assessment and possible intervention must involve the family along with the individual youngster.

The role of genetic factors is unclear. However, current research on metabolic pathways for energy expenditure and storage will contribute to a better understanding of the etiology of obesity. The mechanisms by which hormones, enzymes, and neuroregulators function are becoming better known. There are considerable physiological and metabolic variations between individuals. Differences in energy metabolism and possible defects in regulation even when they have been fully identified and explained would be only one group of factors which could affect the development of obesity. Eating behaviors which evolve throughout children's development are a summary of their internal hunger and satiety cues and of external cues stimulated by family interrelationships and total surroundings. For example, overeating may be a result of family practices or an outlet for low self-esteem. The child's responses begin at birth. Food preferences and aversions can reflect feelings children have toward the influences of parents and other adults.

Disturbed Eating Behaviors

The increase in disturbed eating behaviors appears to be related to persistent weight reduction measures and is cause for concern. Anorexia nervosa is characterized by a relentless pursuit of thinness which can result in life-threatening emaciation. Bulimia, which includes recurrent episodes of compulsive binge-eating and often purging, followed by periods of prolonged fasting, is still not a well-defined syndrome. It is disturbing to persons who develop the habit and may result in physical harm.

This type of behavior has been found in underweight, normal, and overweight individuals. Bulimic individuals have more overt psychological pathology and compulsive behavior than normal persons. The incidence of bulimic behavior has been reported as high as 20 percent in a female college-age population.

Societal Influences

The attitudes and behaviors which predominate in our culture affect how children behave in relation to food and exercise. Often they receive mixed messages related to expected self-control to avoid being overweight and overeating. For example, children are often rewarded with highly caloric foods and sometimes are overfed by well-meaning adults. Family interrelationships contribute to the establishment of positive or negative eating patterns. An overprotective family can restrict self-reliance while a "chaotic" family provides few guidelines. Both settings can lead to eating problems.

Unfounded societal prejudice against the fat person can cause a lack of self-esteem in the fat child. The fat person is an object of social prejudices in many ways including employment and friendships.

The cultural obsession with slimness and weight control is considered by some researchers to be responsible in large part for the current increase in eating disorders. The large increase in literature on binge-purge behavior testifies to the size of this phenomenon.

Studies show that even very young children view overweight as being negative. Normal and underweight adolescents often perceive themselves as overweight.

Current Practice

Professionals working with children are often faced with deciding when some form of intervetion is appropriate for the overweight child. Because most regimens have had a high rate of failure, consideration must be given to the questions "Are the consequences of failure of a weight-reduction intervention worse than the stigmatization of being overweight? Will overweight resolve itself if left unattended, as infant obesity usually does? What is the role of parents and professionals in helping the slightly overweight child? What is it the child wants and needs?"

When making an assessment, apparent fatness should be considered in the context of the total needs of the child. Overweight may be only a side effect of a psychosocial problem.

An important part of working with children is loving and supporting the child during various growth and developmental stages, helping the child learn to cope with size and appearance and to increase self-esteem. This is part of growing up for children of all sizes and shapes and is particularly significant for an overweight child.

Also, children of any age or size can benefit from changing to a healthful lifestyle which includes appropriate physical activity and nutritious food choices. Many fat children slim down by making these changes.

There are relatively successful weight management interventions for adolescents using a multidimensional approach which includes eating behavior, physical activity, and building self-esteem. While the adolescent has primary responsibility to make changes, cooperation and support of the parents is incorporated.

Proposed Approach to Assessment and Action

Even though the problems of dealing with overweight children are complex, there are actions which can and should be considered. We, as a committee, propose guidance for action by health professionals. This guidance is based on assessing weight problems by degree of severity and age. It suggests a progression of activities based on the magnitude and complexity of the problem.

The degrees of severity of overweight are suggested to be: Mild — 75-89th percentile of weight for height; Moderate — 90-94th percentile; and Severe — 95th percentile and above.

The first level of action includes taking growth and family histories and providing information. The second level includes assessment by professional specialists in weight problems and intervention with the caretaker and/or child according to need. The third, and most comprehensive action, involves use of a multidisciplinary team to provide a more complete assessment and develop a plan to be carried out under the family physician.

A Prevention Approach

Prevention measures can be instituted to bring about positive changes in attitude, lifestyle, and eating patterns in a wide spectrum of the population. A series of obesity prevention objectives and activities have been developed using a public health primary, secondary, and tertiary prevention model (see Table 2). Such a prevention program calls for action by many segments of the community which can be stimulated by professionals who work with children.

Recommendations for Further Action

The committee recommends that further action should include the overall areas of:

1. Expanding the approach to weight control problems from a single focus medical model to a multidimensional approach that would include:
   a. Addressing psychosocial factors.
   b. Improving diagnosis of obesity and eating disorders.
   c. Improving health care practices to monitor, prevent, and/or correct problems of obesity and eating disorders.
   d. Developing intervention goals that recognize individual differences and help the individual acquire the knowledge of how to develop his/her best growth and development potential.
2. Fostering changes in indivdual and societal attitudes and behavior to accept a wider and more realistic range of body sizes.
3. Encouraging and supporting actions by agriculture, food industry, and restaurants to provide food choices that help consumers meet individual energy needs in our society of abundant food supply and limited energy expenditure.
4. Expanding opportunities for parent education on how to feed as well as what to feed children.
5. Promoting a variety of physical activities for children of all shapes and sizes as a regular part of their lives.
6. Continuing research to provide a base of knowledge on which preventive as well as treatment action can be developed.

These actions would help to assure optimal growth and good health for the total child. These would require cooperation on many levels and should be a goal for health care providers, educators, and other professionals working with children and their parents.

Introduction and Issues of Concern

How often have you heard someone say to a youngster "Don't eat sweets or you'll get fat" or "You had better lose 20 pounds or you'll be fat all your life." Or heard a casual remark such as "Look how fat she is! How could she let herself go that way?" or "Lose 10 pounds so you'll look great in a swimming suit." Our society, including children, has gotten a message that fatness is ugly at any age. Many of those value judgments that thinness is "good" and fatness is "bad" have been reinforced by a basic concern for good health for children.

Today's research literature contains an increasing number of studies reporting on the binge-purge syndrome among many college women and men. These young adults have adopted various forms of binging and purging food in order to achieve their perceived needs for an acceptable body image. Frequently, the students report that these habits are an outgrowth of earlier experiences of trying to lose weight. Younger children also report consuming very low-calorie diets and adopting excessive exercise regimens through "fear of fatness."

Some parents have the mistaken notion that a "fat baby is a healthy baby" while others believe "a fat baby will be a fat adult." The latter notion may lead to severely restricted infant diets and confusion and tension about what and how to feed.

These are but a few examples of what we have observed to be happening in our society today. As a committee, we feel it is time to take a look at what is happening to the growth and development of children in relation to how weight and body image are dealt with by professionals, parents, and the society as a whole.

Issues of Concern

Our Society is Overly Concerned about Body Size and Conformation to a Slim Image

There is a disturbingly high societal preoccupation with thinness. A majority of children and adults feel pressured to control their weight. In a recent survey by the Citizens' Policy Center in Oakland, Calif., (Olsen 1984) adolescents reported starting as early as 8 to 10 years of age to strive for thin, svelte bodies through weight-reduction diets. Often they began as a result of pressures from parents, other adults, or peers. Sometimes it was self-generated.

We have observed that this concern about weight often leads to use of appetite inhibiters, very low-calorie diet preparations, self-imposed diets including skipping meals, and excessive exercise practices in an attempt to achieve unrealistic weight goals. Rarely is nutritional adequacy a consideration in the selection of food being eaten. Such practices are, in fact, detrimental to the children's health and could lead to serious eating disorders.

The Individualized Needs of the Child Are Not Adequately Considered

Often the adult image of the right body size for the child is not realistic. Since children grow and develop physically, emotionally, psychologically, and socially at very different rates it is often difficult to determine at any point in time what is within the limits of normal growth. Each child needs recognition as an individual. All children need love and support regardless of size and shape.

We have observed a prevailing belief in our society that obesity is a personal problem of the individual with blame placed directly on the individual. The physiological and sociocultural causes of obesity are frequently misunderstood and ignored.

In Current Practice, Interventions Are Sometimes Overly Aggressive or Address Only One Aspect of the Problem

There is little literature on how to deal with weight problems in children. Most research literature relating to intervention applies to moderately or severely obese adults, who comprise less than 10 percent of the overweight adults (Stunkard 1983). The types of intervention used for these studies are often extreme. This has generated a belief drastic changes in lifestyle and eating patterns are necessary to bring about weight reduction in children. Thus the child is forced into unrealistic behavior changes or adherence to a very low-calorie diet which can result in conflict within the family and failure to lose weight. The child may perceive, and rightly so, that the blame is being placed on him for being fat and failure to losing weight reinforces the child's feeling victimized and self-hate.

PREPARED STATEMENT OF MARILYN C. CRIM, M.D., PH.D., MEDICAL DIRECTOR OF THE EATING DISORDERS CENTER AT MARSHAL HALE MEMORIAL HOSPITAL, SAN FRANCISCO, CA

ANOREXIA NERVOSA

Physical findings: Include excessive loss of lean body mass and subcutaneous fat with the loss of breast tissue in women resulting in a reversion in appearance to that of a prepubertal patient. The skin is dry and scaly in many and may be carotenemic. The body may be covered by fine lanugo-like hair. Blood pressure is usually low-normal with orthostatic changes and bradycardia is common. There is decreased blood volume and heart volume proportionate to the weight loss without anemia. Decreased skin and core temperature and acrocyanosis may also be present.

Endocrine: Currently it is felt that physiologic and endocrinologic and features of anorexia nervosa are compensatory regulatory changes secondary to nutritional deprivation and are not due to a primary hypothalamic dysfunction. True anorexia is usually not present. Hypotheses of a primary disturbance in the satiety mechanism or a disturbance in the central control of appetite have not been supported by the majority of studies. Pharmacologic therapies designed to modify a presumptive central defect have met with little consistent success.

Virtually all patients with anorexia nervosa are amenorrheic. Study of hypothalamic-pituitary gonadal function in anorexia nervosa shows a pattern of a prepubertal child in amenorrheic patients with low estrogen and pituitary hormones FSH and LF. Small pulsatile fluctuations of FSH and LH occur, but the nocturnal surges of midpubertal patients are absent as are increased daytime concentrations which occur later in puberty. With the restoration of weight and cessation of constant exercise, a mature pattern of hormone secretion develops and menses may resume. Factors which may contribute to amenorrhea include frank starvation and other forms of malnutrition, excessive exercise, stress and depression.

Adrenal status in anorexia nervosa is characterized by elevated cortisol levels felt to be hypothalamic in/origin. Other adrenal hormones appear to be decreased.

A constellation of symptoms of hypothermia, bradycardia, constipation, dry skin and hair suggest hypothyroidism. In fact, thyroxine and free thyroxine are usually normal or low-normal, but T-3 may be low and the rT-3 high as a consequence of weight loss and these changes are felt to be homeostatic protective adjustment to malnutrition. Basal metabolic rates are suppressed nearly 50% in severely under weight patients. Elevated serum carotene has been associated with decreased T-3 levels and may be an index of severe illness in anorexia nervosa patients.

Skeletal: Anorexia nervosa patients have an increased risk of developing osteoporosis. Low estrogen levels and poor calcium intake are likely contributing factors. Levels of parathyroid/hormone, 25-hydroxyvitamin D, and 1,25 dihydroxyvitamin D are usually normal despite low calcium intakes. Patients with a high physical activity level tend to have a greater bone density. A high incidence of scoliosis (24%) and fractures (61%) has been reported in ballet dancers. Increases in the age at menarche and prolonged intervals of amenorrhea appeared to be associated with increased risk of these complications.

Cardiovascular: Bradycardia is common. Other arrthymias may occur but are uncommon except in the most seriously ill patients. Heart failure and myocarditis may also occur. Sudden death may occur. Factors contributing to cardiac arrhythmias include starvation ketosis, low serum potassium, protein malnutrition, dehydration, acid/base imbalances, drug use (amphetamines/cocaine/caffeine), stress (catecholamines) and ipecac use.

Other systems: Renal problems may include inability to concentrate urine, decreased function due to dehydration and damage due to excessive diuretic use. Liver enzymes may be increased, particularly in the refeeding phase. Serum cholesterol tends to be high in anorexia nervosa and bulimia and fall with refeeding. Patients are usually not anemic, though may have iron deficiency. Mild leukopenia is common, as is mild thrombocytopenia. Gastric atony may result in distention with eating and on rare occasions rupture. Constipation, diarrhea, and abdominal pain are also common. Peptic ulcer disease may also occur, particularly in combination with protein deficiency and high stress. Loss of muscle mass can be marked and result in its own profound weakness. In the situation of selective protein restriction, a near normal percentage of body fat may be present. Excess ipecac use may produce a reversible skeletal myopathy. Immune suppression due to malnutrition may occur resulting in decreased globulin levels, decreased white blood cells (especially lumphocytes) and decreased resistance to infection. Shifts in fluids and electrolytes, hypoglycemia, and starvation may result in fluctuating moods and clarity of thought. This may impact on caretaker's ability to reason with the patient regarding the severity of their condition. In addition, sleep patterns are frequently abnormal resulting in a sleep deprived state.

BULIMIA AS A SUB GROUP OF ANOREXIA NERVOSA:

Intentional starvation which accompanies bulimia produces similar physiologic changes as those occuring in isolated anorexia nervosa. In addition, the physiological changes due to bulimic behaviors may occur.

BULIMIA:

Little information is available on normal weight or overweight bulimic patients.
Nonpurging: A largely unidentified and unstudied group. Obesity and its medical risk factors, binge/fast cycles, gastric dilation or rupture, pancreatitis, esophagitis may occur in this population.
Purging: (Bulimarexia) Hypokalemic alkalosis due to loss of gastric acid when vomiting is a major medical concern in purging bulimia. Symptoms of hypokalemia include muscle weakness, constipation, abdominal pain, polydipsia, nocturia, headache and palpitations. Hypokalemia results in an increased risk for life threatening cardiac arrhythmias and cardiac

dysfunction. Painless salivary gland swelling has been described in patients with anorexia nervosa and in those with bulimia and emesis. Dental erosions are associated with vomiting behavior as is oral cavity injury or finger injury from efforts to self-induce vomiting. Esophagitis due to chronic relaxation of the lower esophageal sphincter, bleeding from an esophageal tear (Mallory-Weiss), and even esophageal rupture may also occur associated with vomiting. Hypokalemia may also result from excessive laxative abuse. Various types of laxatives may be used from fiber and stool softeners to stimulants and enemas. Laxative abuse can also result in melanosis coli, a benign discoloration of the mucosa or a more serious condition, carthartic colon which requires laxatives in order to eliminate fecal wastes. Diuretics abuse is associated with hypokalemia, dehydration, hyponatremia and possible kidney damage substance abuse, eg. alcohol, amphetamines, cocaine and marijuana, may also be used in eating disorder patients to control their appetite or facilitate binging and purging.

NUTRITION ISSUES IN EATING DISORDERS:

Information on nutritional status of eating disordered patients is extremely limited, particularly for bulimic patients. In a study by Huse and Lucas of dietary patterns in anorexia nervosa, 25% ate regular meals of satisfactory quality; 11% ate irregular meals of satisfactory quality, though approximately half of these reported fasting, vomiting or binge-eating; 19% ate regular meals of unsatisfactory quality; and 41% ate irregular meals of unsatisfactory quality; 75% of them reported fasting, vomiting or binge-eating. A total of 63% of the patients ate meals of unsatisfactory quality.

Crisp has reported the average caloric intake of a group of strict anorexics at about 750 Kcal (75% took less than 800 Kcal per day). Anorexics who binged and vomited took approximately 2000 Kcal per day, increasing to 3000 to 5000 Kcal associated with bulimic episodes while normal controls consumed just over 2000 Kcals. Considerable individual variation occurs. The average carbohydrate intake in Crisp's anorexics was about 80 grams, with 30% of them taking less than 40 grams per day. Very low carbohydrate intakes may result in depletion of body glycogen stores, forcing the body to mobilize its protein reserves (muscles) to generate glucose for brain metabolism. Rapid weight loss, as much a 5 to 10 pounds can occur. This weight would be restored rapidly with the resumption of carbohydrate intake.

Such rapid weight fluctuations can further paralyze the patient's ability to return to normal eating. Crisp showed the mean protein intake of each group to be near normal. However, many of the anorexic patients consumed low protein diets, 63% taking less than 40 grams per day (the RDA) and 20% taking less than 20 grams per day (equivalent to about 3 oz. of protein or 2½ glasses of milk). Two anorexic patients took excessive protein: 180 and 390 grams per day. (The later equivalent to approximately 3.4 lbs. lean meat.) As discussed previously, calcium intakes are poor in eating disordered patients. Little information is available on the status of other nutrients in eating disordered patients. In bulimic patients, cyclic binging, purging and starving further complicates attempts to assess their nutritional status. Unpredictable carbohydrate and protein intakes, fluctuating salt and water intakes and exercise (sweat) can result in rapid weight changes and add to the chaos of the illness and the panic of the patient. It would be very difficult to accurately assess the actual nutrient retention of these patients while they continue to purge.

Refeeding in anorexia nervosa: The initial basal metabolic rate may be as low as 750 Kcal per day (60-80% expected based on height and weight) and thus patients are likely to gain weight initially with less than the predicted caloric requirements for height and weight. Lean body mass tends to be greater than expected for the weight, but consistant with depletion of body fat stores. Despite this, the data of Forbes et al suggest that lean body mass increases account for 60-70% of the weight gain in the early recovery phase (40 days). They found no significant difference in outcome between a high protein (20%) and a low protein diet (10%) (which actually is in the range of the RDA recommendations, thus normal). A gradual increase in calories and adequate protein to allow a weight gain of 2-4 lbs. per week is usually recommended for inpatient treatment. Outpatient goals have to be more conservative with an initial focus on weight stabilization. The rate of gain will be dependent, in part, on the fraction of lean body mass, with more Kcals required per pound of gain with increasing percentage of fat. Thus as patients approach ideal body weight, increased Kcals are required to continue the same rate of weight gain, often to the distinct surprise of the patient.

Refeeding Complications: Usually not major, but acute, gastric dilation can occur and is felt to be neurogenic in origin. Rupture can occur and has an 80% mortality. Pancreatitis can also occur as an etiology of acute abdominal pain with refeeding. Liver enzymes (transaminases, LDH, alk. phosphatase and cholesterol) are often increased in anorexic patients during refeeding, particularly if the rate is excessive. Recovering patients may, in fact, binge and this needs to be carefully monitored with upper limits set for daily intake. Heart failure and refeeding edema has also been observed during nutritional repletion of malnourished patients (shift in sodium/potassium compartments, protein malnutrition, catecholamine abnormalities secondary to malnutrition). Patients are frequently hypotensive for days to weeks after fluid status is normalized, most likely associated with these factors as well. Water intoxication may occur associated with too aggressive intravenous hydration or excessive fluid intake by the patient. Bowel dysfunction may persist or even worsen during the refeeding phase and require close monitoring.

Bulimic patients may be underweight, normal weight and body composition, normal weight and protein malnourished, or overweight. For patients who are not underweight, a healthy, well-balanced diet is introduced. Hypokalemia and dehydration are corrected with oral intake of food potassium supplements and water as required. Intravenous supplementation may be required in the acute stage.

In summary, this overview of the medical and nutritional status in eating disordered patients may help to clarify the serious risks of these conditions. It is particularly alarming to note that the major population at risk is 12 to 20 years old. In addition, simple medical and nutritional stabilization and rehabilitation are rarely adequate treatment to prevent relapse of symptoms. Comprehensive psychological intervention in the form of individual family and peer group therapy appears to be the most effective treatment of these patients.

CHILD &
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OVER HALF A CENTURY OF COMMUNITY SERVICE ACCREDITED PROFESSIONAL · CONFIDENTIAL

August 11, 1987

Mr. George Miller, Chairman
U. S. House of Representatives
Select Committee on Children,
Youth and Families
385 House Office Building - Annex 2
Washington, DC 20515

Re: The Select Committee on Children, Youth, and Families field hearing in San Francisco, California entitled, "Eating Disorders: The Impact on Children and Families."

Dear Mr. Miller:

We would like to voice our support to the Committee for its interest in eating disorders and the impact on children and families. Currently, we have a program entitled C.A.R.E. (Choices About Eating and Recovery) that deals with a variety of eating disorders. We know that these are serious diseases with multiple causes, including physical, psychological, familial, social, cultural, and genetic factors and it is our philosophy to provide our clients with evaluation, psychotherapy, support, and treatment.

This last spring, we conducted educational workshops focused on preventive education in several local high schools. We asked these classes of high school girls to complete a Food Focus Quiz and to tabulate their results. Categories were made based on the following:

-- A score of 31 or over categorized the individual as having an eating disorder.

-- Responses of "usually" and "often" to key questions also categorized the individual as having an eating disorder.

-- Responses of "sometimes" to other key questions placed the individual in the high risk category.

The following chart reveals results we would like to share with the committee:

Results of Food Focus Quiz Conducted in Spring of 1987

Local Area	Number of Students Tested	Range	Mean	High Risk	Number Considered to Have an Eating Disorder
School A	20	0-50	17.7	8 (40%)	5 (25%)
School B	27	1-84	20.9	6 (22%)	9 (33%)
School C	80	0-46	21.0	17 (21%)	21 (26%)
School D	168	0-61	19.3	29 (19%)	58 (34%)
* Control Group	31 (clients)	26-72	52.47	---	(100%)

* Anorexia Nervosa	8 cases (26%)
* Compulsive Overeaters	10 cases (32%)
* Bulimics	11 cases (35%)
* Atypical Eating Disorders	2 cases (6%)

(The FFQ was tested for reliability and validity by using our eating disorder client population as the control group.)

As can be seen from our results, eating disorders among teenagers are a prevalent problem that must be further researched in an effort to provide successful prevention and treatment.

Again, we commend the committee for its efforts to explore the problem of eating disorders and if we may be of any assistance concerning this matter, please feel free to let us know.

Respectfully yours,

Marion Comas, LCSW
C.A.R.E. Director

Saunook Pedigo
Saunook Pedigo, Ph.D.
Assistant Executive Director

Charlie
Charles E. Gentry, ACSW, LCSW
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PREPARED STATEMENT OF JOHN SARGENT, M.D., DIRECTOR, EATING DISORDERS PROGRAM, ASSISTANT PROFESSOR, PSYCHIATRY AND PEDIATRICS, UNIVERSITY OF PENNSYLVANIA, SCHOOL OF MEDICINE, PHILADELPHIA, PA

Food, eating behavior, body shape and weight reflect our culture's emphasis on youth, fitness and attractiveness and the culture of individual families. Achievement, morality, personal control and individual autonomy can be represented by the capacity to diet and the ability to control food intake and weight. The number on a scale takes on magical significance, demonstrating special capacity or an essential accomplishment. Loneliness, emptiness, meaninglessness, anger and unhappiness can be assuaged by the capacity to weigh 115 pounds, 100 pounds or better yet, 90 pounds. Hungers--hunger for nurturance and support, hunger for recognition and approval seem to be satisfied by denial of hunger for food. Ultimately control of food intake becomes controlling and dieting, which appeared to promise freedom, imprisons. Development ceases, isolation, secrecy and guilt increase and refusal of foods, binging, vomiting and furtive impulsive use of laxatives develop a life of their own, reinforcing further isolation, secrecy and guilt. Anorexia and bulimia become a tightrope which many young women and some young men walk--balancing always the protests of a defiant adolescent ("I will do what I want") and the needs of a vulnerable, hurting child ("I can't help it"). Parents, physicians, therapists, siblings, friends and teachers are caught in an impossible bind--"if you cared about me you wouldn't let me do this to myself--you would control me; but if you really cared about me you would respect me, let me do what I want and not try to control me".

Repeated exhortations to cease dieting, binging and purging, expectations that these behaviors will remit without additional significant change on the part of the individual or her family, and excessive focus upon the eating behavior further reinforce helplessness and alienation. Failure to recognize the passion of the individual, the role of the complex demands upon women in our culture and the vulnerability and caring of family members often leads to inadequate therapeutic responses to the symptoms. Prepackaged eating disorder programs and competing therapeutic orientations relying upon one primary modality of treatment frequently fail to match the power of the symptoms. This also does not meet the need of the individual and her family for respect, understanding, and a challenging and involving relationship. Multidisciplinary treatment carried out by several professionals often lacks consistency and fails to convey the intensity necessary to interrupt the repetitive cycle of eating disorder symptoms.

Meanwhile the media continues to emphasize both the pleasure of food and the possibility, even necessity, of achieving a perfect body through obsessive concern with dieting, exercise and personal control. Parents are unsure of decisive responses when teenagers are unhappy or involved in dangerous behavior. They often are unable to improve their own lives when dissatisfied or depressed and uncomfortable with the need for assistance and support from outside the family. In families with a child with an eating disorder, one often sees poor collaboration between the parents. Parents fluctuate between too much closeness and too much distance between themselves and their child. Often, also, family members repeat the same ineffective responses to the disturbed eating behaviors, further reinforcing their sense of helplessness. Physicians often fail to recognize and deal with excessive concern with weight early, before dieting behavior is entrenched and weight loss is pronounced. Mental health practitioners often do not recognize the varied needs of both the individual and her family which are satisfied by the excessive concern focused upon the eating disorder symptoms. The therapist then may not be able to help resolve areas of difficulty such as marital dissatisfaction, problems with other children or intergenerational conflicts which are not identified directly by the family. As these problems persist, they create further stress which perpetuates the eating disorder.

Effective treatment is based on a thoughtful, committed and integrated approach to the individual and her family. Family systems theory provides a theoretical orientation to treatment which emphasizes collaboration among professionals and family members. This theory forms the basis of the approach to treatment of anorexia and bulimia developed and refined over the past two decades at the Philadelphia Child Guidance Clinic, where I work and direct the Eating Disorders Treatment Program. Our treatment approach emphasizes that family members assume an active role in limiting the eating disorder symptoms. The family is also supported to reinforce direct expression of affect and alternative methods of responding to stress, disappointment and insecurity which are not self-destructive and self-defeating. In order to accomplish this the family must be aware of the physical risks of anorexia and bulimia and the physical condition of the individual. They must also become increasingly aware of her hurts, vulnerabilities, anger and loneliness. They must learn, even it if hurts them, what she finds so difficult to swallow and digest in her life. The family has believed that this child is without pain and she has colluded with them by denying her hurt verbally. The family together must look at the reasons for starvation or repetitive binging, find ways of speaking about these hurts and resolve them. Usually this involves resolving problems of the parents as well as their child with the eating disorder. Family members, significant others and friends participate actively throughout treatment. As they do, their sense of helplessness and powerlessness are patiently appreciated by the therapist at the same time as they gradually become more confident and effective. Disagreements among family members are resolved directly so that the eating disordered individual is freed from power struggles and responds to consistent injunctions to maintain normal weight, and express herself directly. As the individual begins to state her feelings and wishes verbally and concentrates on other areas of concern than weight and food, the therapist supports her. He then helps her to gain a sense of power, competence and self-respect through her concrete accomplishments within the family and in her own life. This is done directly and experientially in therapy sessions.

Mutual trust and respect develops between the therapist and each family member. This further encourages the growth of strong and flexible relationships among family members. Both individual autonomy and effective connections between people based upon respect and caring are supported. Old resentments can be expressed and resolved. Family members learn to criticize people's actions directly and to respond to criticisms constructively without defensiveness or abandonment. The position of women in the family and their role within their community can be strengthened and solidified in therapy. The power imbalance previously addressed by the refusal, denial and self-sacrifice associated with the eating disorder is altered. Other modalities of treatment including medication, relaxation training, hospitalization and individual and group psychotherapy are integrated within this approach to treatment in an individualized manner. Throughout, the family, as a whole, and as individuals, recognizes their responsibility for their own lives and relationships and their capacity to help themselves and each other live in the best way possible. They learn individually that they can respond to pain and change by supporting one another, rather than avoiding change or denying their pain.

Preventing eating disorders is not an easy or straightforward task. Events, such as these hearings, which point out the hurt and passion underlying eating disorders help us to identify vulnerable young people and their families earlier. The complex link between the inferior position of women in families and our communities and eating disorders directs us toward necessary social change for women. The repeated dangerous clamor of the media to convince us we can, and must, look just the way we want, should be quieted.

Children and adolescents do not know the risks of dieting and they must be helped to avoid excessive concern with food and weight as they progress through the physical changes at puberty. We all must learn to accept the changes in appetite and body shape which occur within the life cycle. Parents also must learn that pain is a part of growth and that an adolescent's discomfort is not a sign of parental failure but a problem to be dealt with and resolved over time, patiently and compassionately. Our schools can help with this as they learn to educate for relationships as well as for achievement. There must also be better collaboration and less blaming among parents, school personnel and health care and mental health professionals. Committed, effective treatment, often necessary over a long period of time, must be more available, more accessible and more adequately covered by insurance. These changes will likely be difficult for all of us to swallow and digest. Just as with anorexia and bulimia there are no simple solutions, only the patient, painstaking and passionate work of learning to talk together, live together and help one another.

Respectfully submitted,

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Program
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